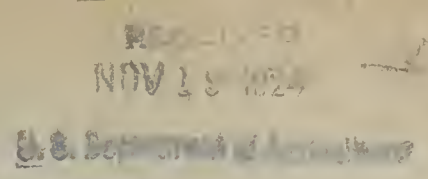
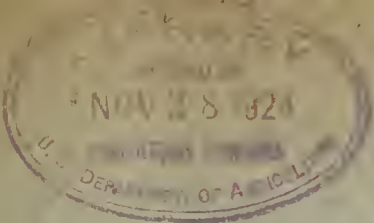


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THE AMERICAN ELEVATOR AND GRAIN TRADE

Printed in U. S. A. Entered as second-class matter June 26, 1885, at the Post Office at Chicago, Illinois, under Act of March 3rd, 1879. Established 1882

PUBLISHED BY Mitchell Brothers Publishing Co. } A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS. } One Dollar Per Annum SINGLE COPIES, 15 CENTS

VOL. XLIII 431 South Dearborn Street, Chicago, Ill., November 15, 1924 NO. 5

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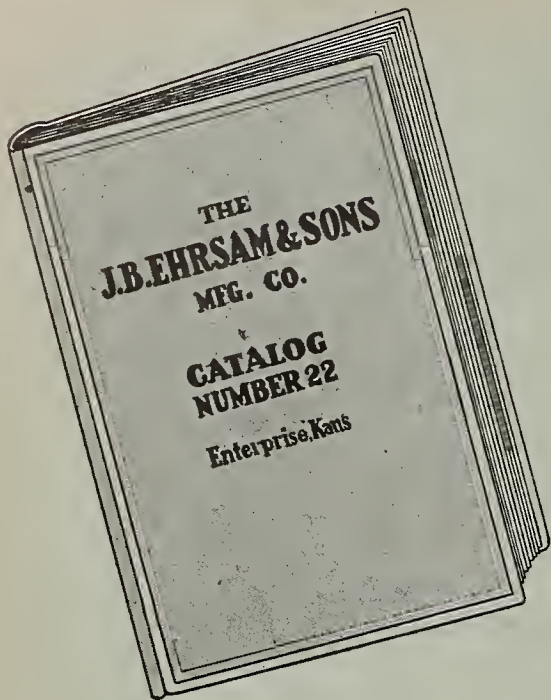
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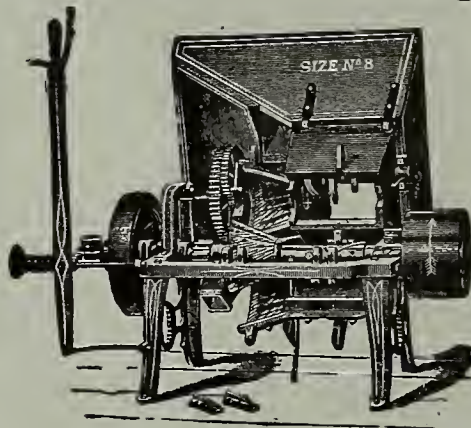
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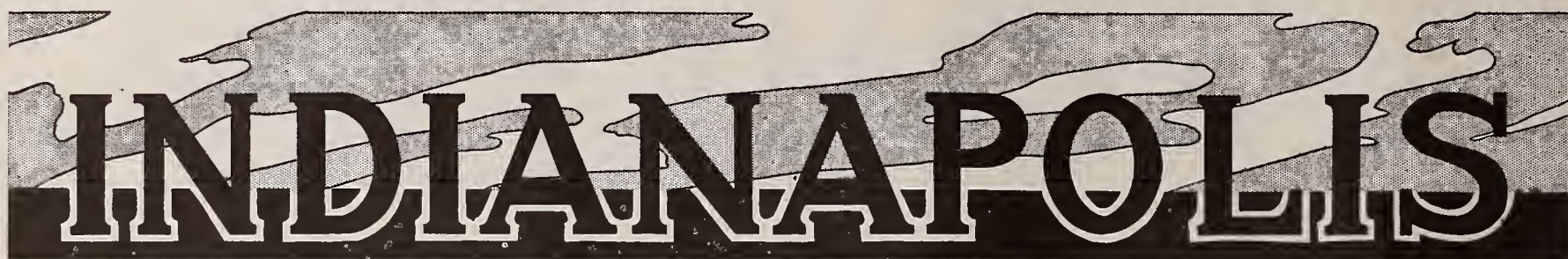
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Movement of Grain and Hay During the Year 1923

	Receipts	Shipments
Corn	17,975,000 bushels	12,524,000 bushels
Oats	12,080,000 bushels	10,670,000 bushels
Wheat	6,131,000 bushels	3,927,000 bushels
Rye	383,000 bushels	331,000 bushels

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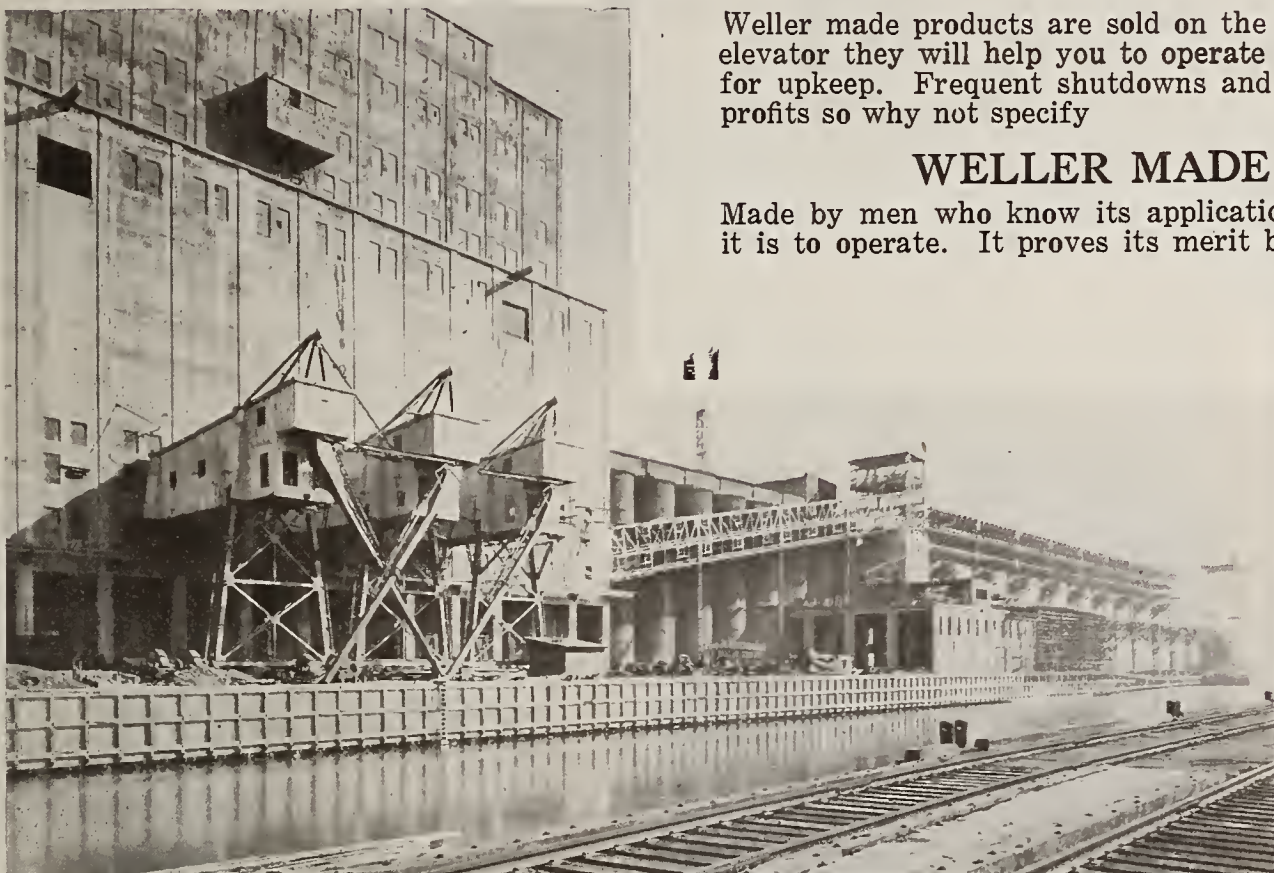
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LAKE GRAIN TRADE LIVELY THESE DAYS

Buffalo Elevators Are Operating Almost at Top Speed.

The lake-grain fleet is traveling at a goodly clip these days and as a result the Buffalo elevators are operating at almost top speed. For the first fifteen days of October the fleet delivered at this port 22,500,000 bushels; and up to yesterday morning the receipts at the local elevators totaled 155,000,000 bushels, an immense increase over last season.

The vessels at the elevators here yesterday had on approximately 2,000,000 bushels and on the preceding day the elevators unloaded 2,120,000 bushels.

The elevators are reported in good shape to keep up the good work, and cars were never in better supply. The Barge canal is handling a fair share of the grain eastbound, and the export movement is reported good.

"The car supply was never better," said an elevator man yesterday. "They are simply throwing cars at us these days. Indications point to heavy movement of grain down the lakes as long as long as the boats can navigate."

There is another big grain-laden fleet on the way here, and it looks now as if there will be a good-sized lineup at the elevators right through the season, marine men say.

The package freighters are keeping fairly busy these days, both eastbound and westbound traffic having been increasing of late. The Utica and Conners of the G. L. T. C. fleet are the only boats not in commission at present.

Marquette; W. H. Wolf, Ashland; John Stanton, Progress, Detroit, light.

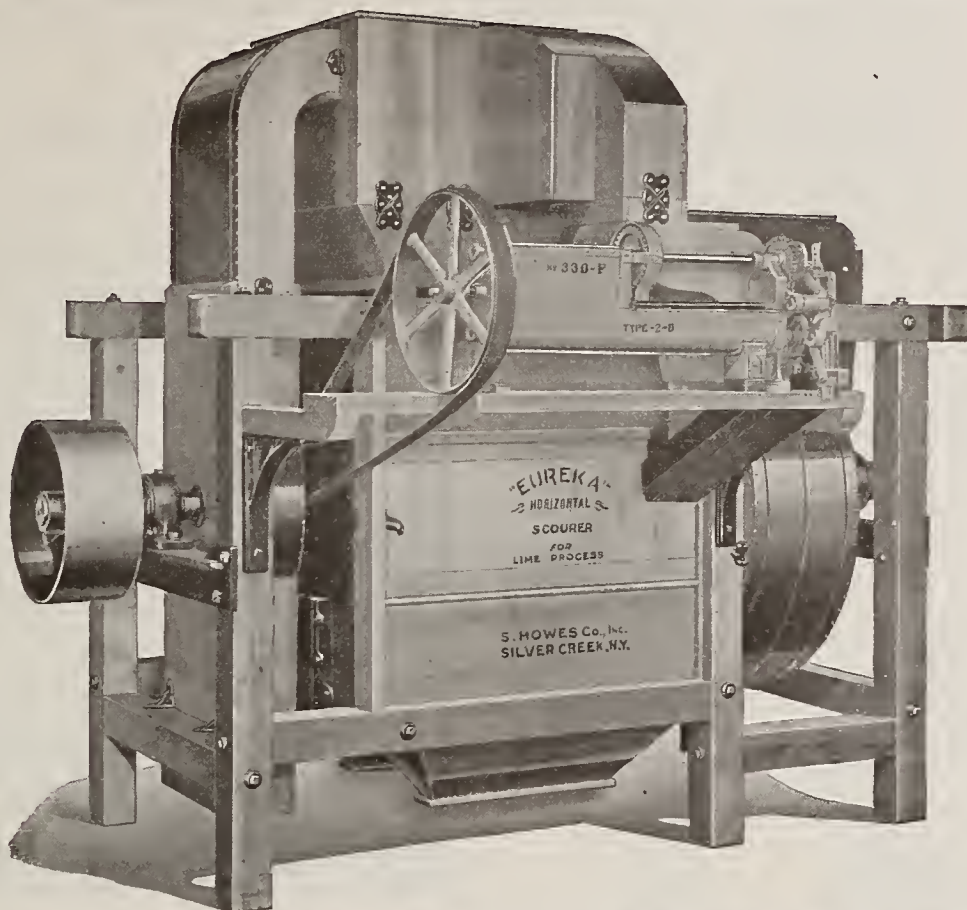
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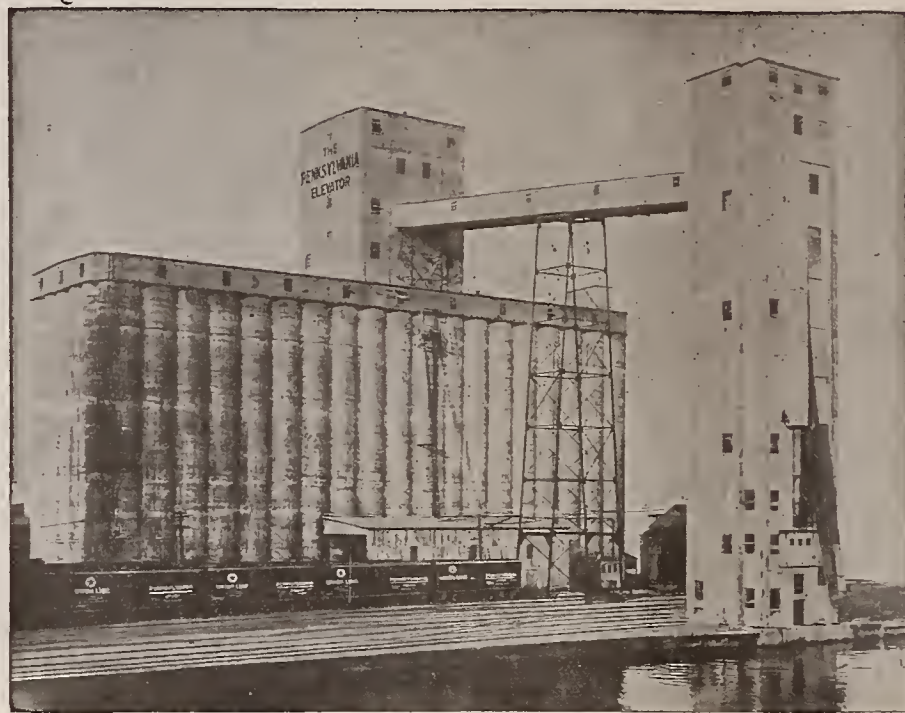
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The "Knickerbocker Cyclone" Dust Collector



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Acceptances & Call Loans secured by	
Acceptances	8,233,209.99
U. S. Government Securities.....	14,360,955.13
Other Securities and Advances.....	20,941,728.80
Customers' Liability a/c Acceptances and	
Letters of Credit.....	31,907,947.96
	<u>\$79,499,385.19</u>

LIABILITIES

Subscribed Capital & Surplus	\$15,250,000.00
Capital Paid In	\$10,250,000.00
Undivided Profits and Reserves.....	2,303,837.26
Due Banks and Customers.....	33,814,758.66
Acceptances and Letters of Credit Out-	
standing	33,130,789.27
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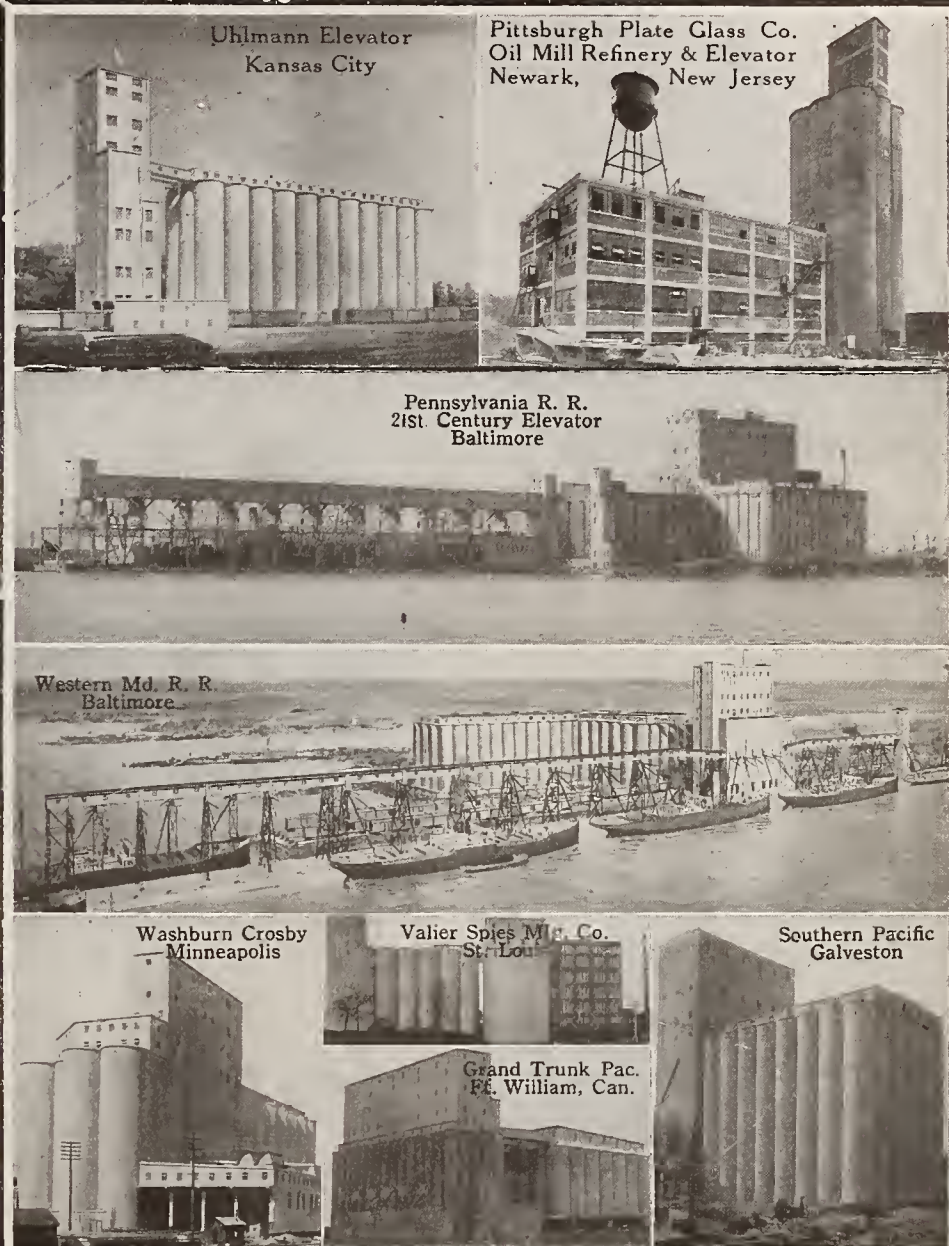
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to tell you the exact condition of
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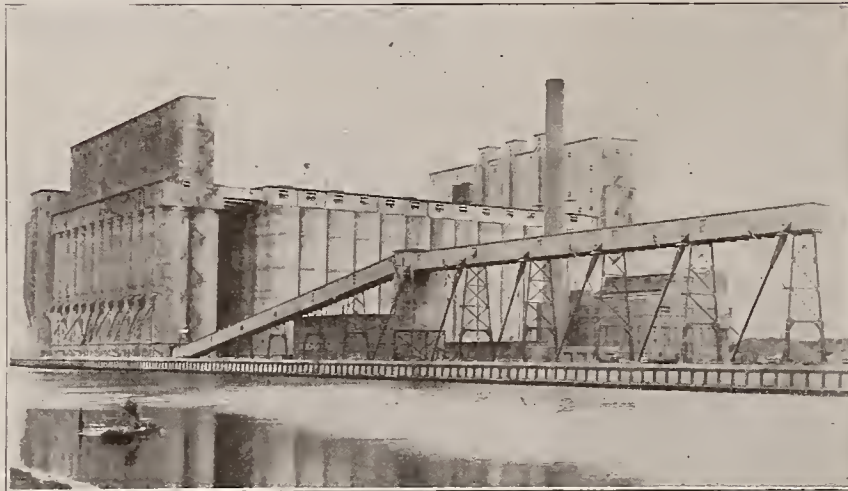
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Manchester, England
Capacity 1,500,000 Bushels
Completed 1914



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Buenos Aires, Argentina
Capacity 750,000 Bushels
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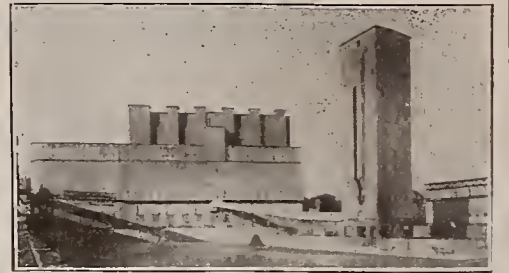
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Chicago & North Western Railway Elevator
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Capacity 10,000,000 Bushels
Completed 1920

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Capacity 2,600,000 Bushels
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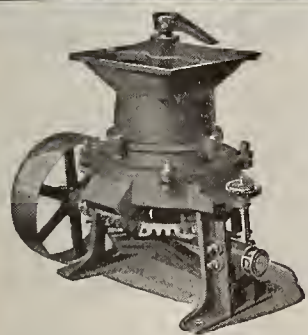
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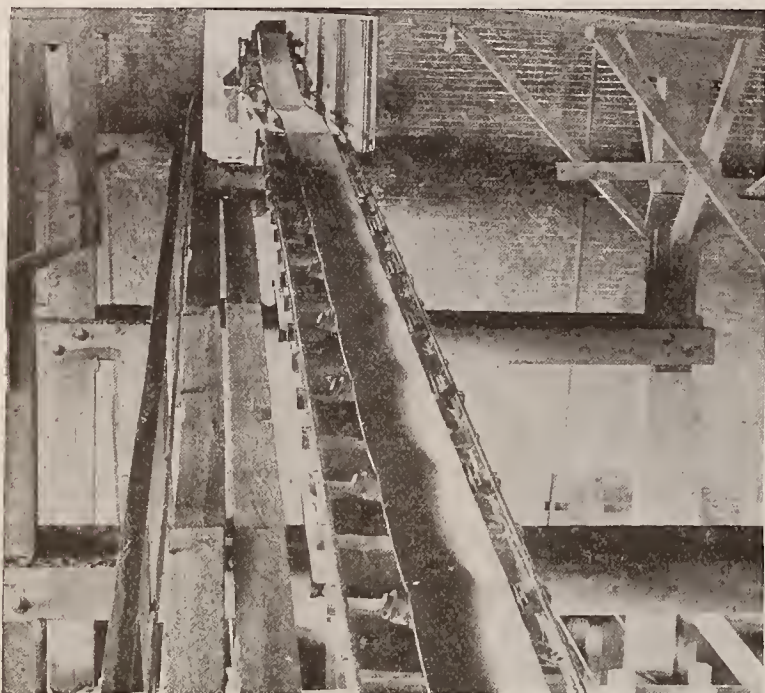
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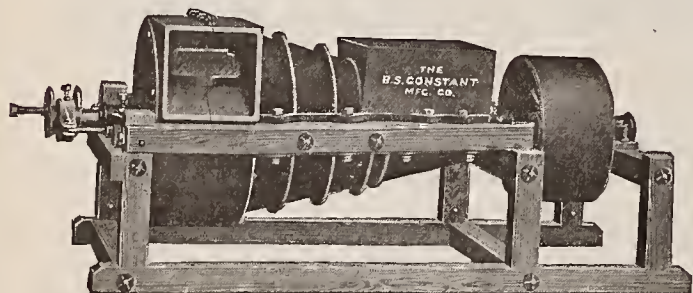
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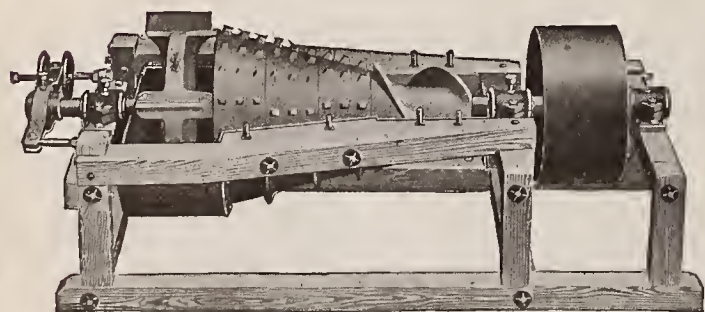
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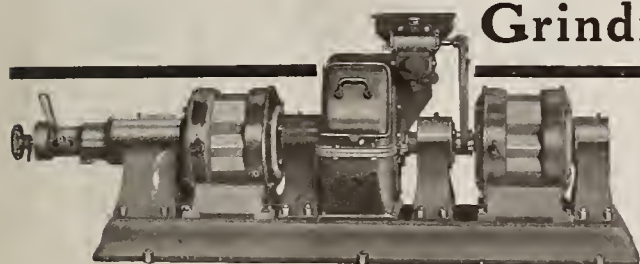
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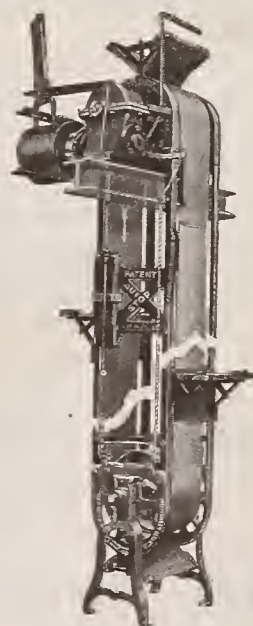
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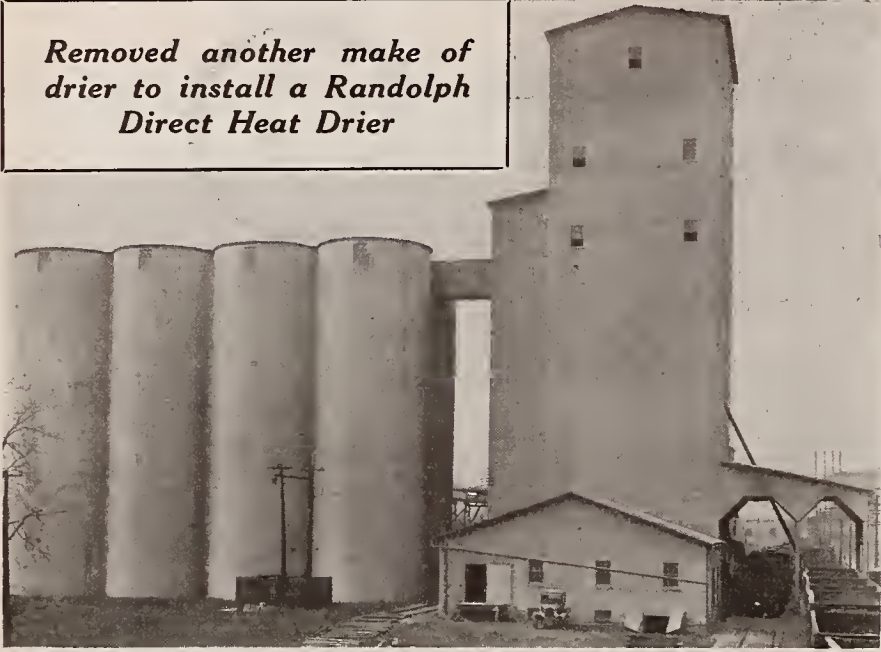
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Nov. 15, 1924

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Per A. T. Ward

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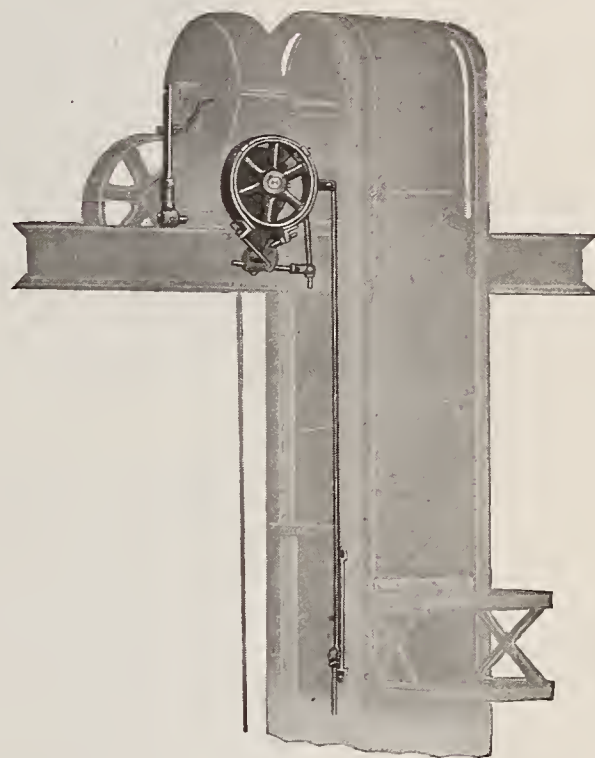
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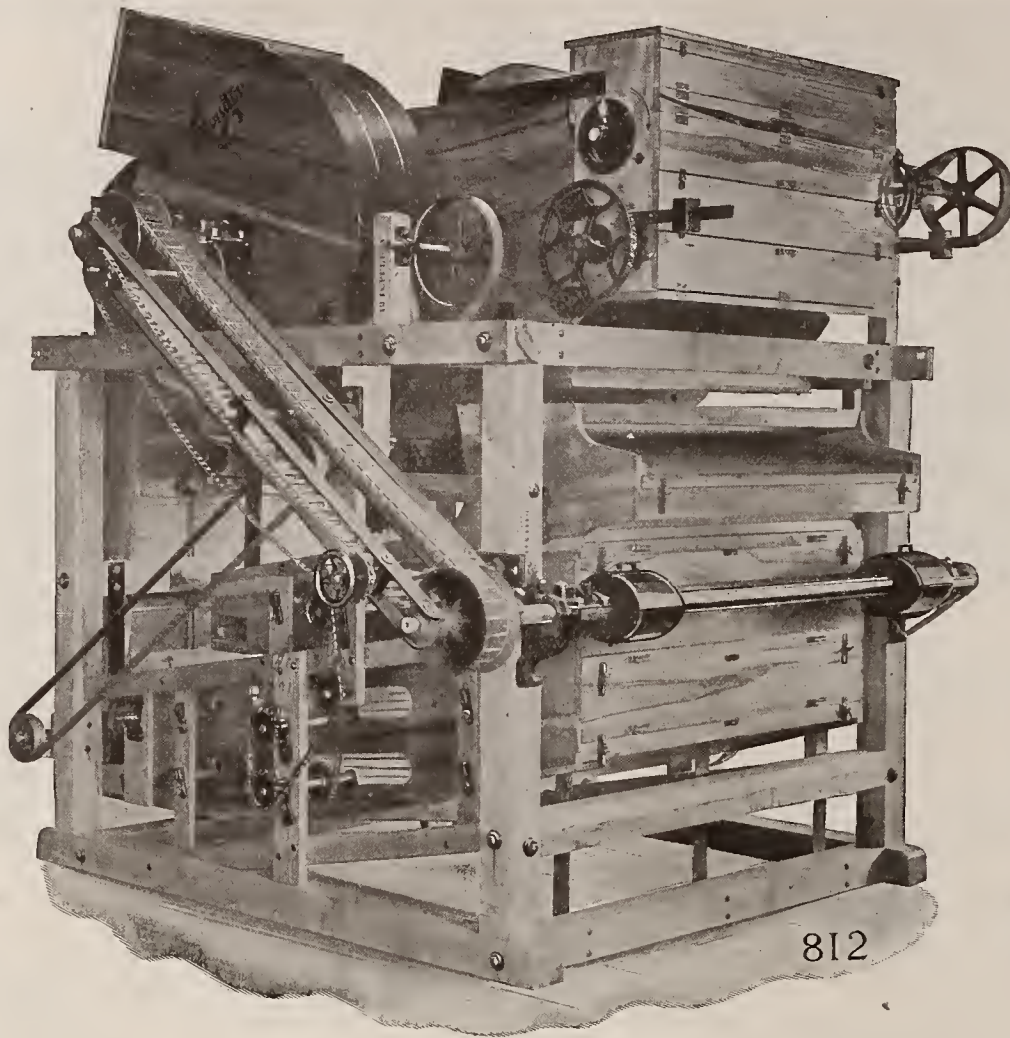
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Subscription price, \$1.00 per year.
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Established in 1882.

VOL. XLIII

CHICAGO, ILLINOIS, NOVEMBER 15, 1924

NO. 5

Wooden Elevator Destroyed by Dust Explosion

Last of Wooden Elevators in Milwaukee Demonstrates by Spectacular Explosion That Wooden Structures Are Not Immune to Dust Hazard

By W. A. NOEL*

THE destruction of the Chicago, Milwaukee and St. Paul Railroad Company's Elevator "E" in Milwaukee, Wis., disproves the theory that dust explosions do not occur in grain elevators of wooden construction. The records of the United States Department of Agriculture show that buildings of many types of construction have been destroyed by grain elevator dust explosions. In recent years the most destructive explosions have occurred in large concrete houses, and Government reports of investigations of them have been widely distributed. The less frequent occurrence of explosions in wooden buildings has led to a belief that wooden elevators are immune from the hazard that has been slowly but steadily taking its toll from modern re-inforced concrete structures. True, the old wooden elevators have been slowly passing out of use, usually because of the fire demon. Elevator "E" marks the last chapter in Milwaukee's history of wooden elevator fires. Its burning destroyed the last of a number of wooden elevators that stood in what was once the center of America's grain activities. They have been replaced by concrete, fire-resistant structures.

No evidence is at hand to show what part dust explosions may have taken in the destruction of many of these elevators. Although it is possible that they had no part, it is probable that they were as important a factor in many cases, as they were in the destruction of Elevator "E." This elevator burned during the day, when there were many observers. The dust explosions which took place were recognized by their visual characteristics rather than by detonations. In fact the explosions were puffs caused by the rapid propagation of flame through a dusty atmosphere, with the resulting gases readily vented, but they spread the flames through the entire structure which was quickly destroyed.

The elevator consisted of two parts—an old wooden building and new concrete storage tanks. The old wooden building was built in 1876 and was operated by Philip D. Armour, founder of the

Armour interests. It was 333 feet long, 85 feet wide and 125 feet high. The bins, 245 in number, made of 2 by 6 inch cribbing, were 55 feet deep and held approximately 1,000,000 bushels of grain. Beneath the first floor, where cars were loaded and unloaded and grain transferred, cleaned, clipped and ground, was a basement into which the elevator legs extended. Above the bins, all



FROM TOP OF DRIER LOOKING EAST

of which were covered, was the bin floor and above it the conveyor belt floor, receiving scale floor and head floor. The shipping scales were on the belt floor. On the head floor were 27 elevator legs driven by a line shaft. The shipping leg utilized a three-foot rubber belt carrying two lines of staggered Buffalo buckets and had a carrying capacity of 25,000 bushels of grain an hour. Electric power was brought into the elevator at the southeast corner of the building on the first floor just be-

neath bin Number 2 where a room 7 by 9 feet, fitted with panels and cabinets, contained all fuses and switches. Transformers outside of the building stepped down the voltage from 2,200 to 220 volts.

Near the transformer was an oat bleacher, consisting of a furnace, a sulphur-fumes tank and a bleacher tower. To the east of this bleacher, 70 feet from the workhouse, an addition had been constructed in 1917. It consisted of 21 concrete tanks, with 12 interstice tanks, providing storage capacity for 650,000 bushels of grain.

Many additions, alterations and repairs had been made to the plant during its 48 years of operation. The insurance rate had been reduced during the last year, owing to improvements in the elevator, and at the time of the fire some 18 mechanics were making changes in the equipment. All the electric light bulbs on the first floor and basement had been replaced by dust-proof lamps. All power lines had been put in conduit while the lights were on open wiring circuits. In the basement the boots of the elevator legs were being enclosed so as to improve the dust conditions.

The elevator was operating at about 70 per cent capacity. The force had been reduced to 33 and more than two-thirds of the wooden bins were empty, so that only about 300,000 bushels of wheat, corn, oats and barley went through the fire. Most of the grain was salvaged.

While the destruction was so complete as to obliterate all clues to the cause of the fire, conditions reported aid in analyzing the conflagration. The fire is said to have started in the southeast corner of the elevator about the hoppers bottoms of the bins. As shown in the diagram of the bins, a line shaft ran through the building between the hoppers sections of the second and third rows of bins, to the bleacher, and this line shaft had a friction clutch. The superintendent believed that this may have caused the fire. When the fire started the bleacher was in operation. An oiler on the steamer *Nevada*, which was taking on a cargo of oats, saw what he thought was smoke coming from the oat bleacher. The loading foreman said it was steam, but, not being entirely convinced, went



ELEVATOR "E", MILWAUKEE, WIS., BEFORE THE FIRE



DESTRUCTION OF ELEVATOR "E" BY EXPLOSION AND FIRE

*An official finding approved October 15, 1924, by W. A. Noel, associate development engineer, Bureau of Chemistry, Department of Agriculture, Washington, D. C.

into the elevator to investigate. He found the southeast corner of the work floor filled with smoke, whereupon he called several elevator employees to help connect a line of hose to the hydrant. He then ran to another part of the building for more hose. Before he returned, the whole place was filled with smoke. About 30 seconds after his return flames began to shoot out through the windows and spread rapidly throughout the building. The *Nevada* cut its tie lines and departed with a cargo of only 12,000 bushels of oats.

A Federal grain sampler about two blocks away from the elevator, noticed smoke coming out from the windows of the receiving-scale floor at the east end of the building. Then a puff of flame shot through the windows on the north side, followed by dense clouds of black smoke.

The superintendent had gone into the elevator to locate the fire and warn the employees. When he reached the third floor, two electricians, assigned to repair work on that floor, were looking at an elevator leg to see where the smoke was coming from. Failing to locate the fire, the superintendent returned outside, remarking to the men, "There will be some more explosions. Watch her! There she goes!" Just then another explosion spread the flames through the entire building, which in a short time was one mass of flames.

In the meantime a fire alarm had been turned in and fire engines began to arrive. The fire chief states that on arriving at the elevator he ran across the railroad tracks and down along the side of the building. When he was about opposite the center of the building an explosion blew out the elevator sides.

The superintendent stated that an odor of burning rubber in the elevator led him to believe that the fire was caused by electric wires, although he also suspected that it may have started by the action of the clutch which connected the main cleaner line shaft on the work floor to the extension line shaft used to drive the bleacher mechanism.

As shown in the diagram, the fire started around the shipping leg which was in use at the time in loading the *Nevada*. The shipping leg was equipped with a rubber belt. It passed up through bin Number 14 and appears to have been the passageway through which the smoke and flames were first conducted. Although it seems unlikely that a leg with the capacity of this one, while working at only a fraction of its capacity, should become choked,

wiring, as claimed by some of the elevator officials, by an overheated bearing, as suggested by the owner of the elevator, by the burning through of the rubber belt in the shipping leg head by friction during a choke-up, or by the shaft getting out of alignment, permitting the belt to work off the pulley enough to rub the wooden casing and start a fire, the fact remains that the spectacular blaze and rapid propagation of flame throughout the structure were due to the two dust explosions which took place.

The flame shooting from the upper story windows, followed by dense clouds of smoke, as described by one witness, was undoubtedly caused



CONCRETE TANKS INTACT AFTER FIRE

by the first explosion. The explosion anticipated by the superintendent was the second one, which was also seen and described by the city fire chief.

These explosions disprove the theory, held by many, that dust explosions never occur in wooden elevators.

CANADIAN ELEVATORS LOSE IN GRADING WHEAT

By C. H. BROOKS

Protests are being made by farmers in the three Prairie Provinces over the alleged stiffening of wheat grading. Commissioner N. Snow, of the Board of Grain Commissioners, has had a conference with the farmers on the subject. Farmer representatives were firm in their contentions that

samples from the different parts of the country whereby the commercial grades could be fixed. Mr. Snow stated that as soon as that was done, the Standards Board would be called together, and, if any farmers organizations would like to have a representative on that Board, whom the Board considered had a practical knowledge of grading of grains, so far as he knew there would be no difficulty in getting him appointed.

One of the peculiarities brought to light by the protest raised by the farmers is that all elevator companies claim that they have been badly hit themselves, and have lost thousands of dollars since the commencement of the present season. They explain that all this has been brought about owing to their country agents grading the wheat when received from the farmers too high, and that when the grain reached inspection points the Government inspectors reduced the grade. That did not merely apply to Calgary but to Fort William as well, where it had been contended by some of the farmers, who had lodged the complaints, the grading was not so strict.

"JIM DUNN"

By HOOZUS

Jim Dunn, who runs the elevator at Sperry Siding, says: "Old Andy Utz dropped in th' other day, an' he says t' me, he says: 'Dunn! I'd think ya'd get all-fired sick o' this here bizness. You've been at it a whale of a long time now. Seems t' me ya'd get mighty tired a' dickerin' an' a' dealin' with these here farmers all th' time.'"

"I says t' Andy, I says: 'Andy! it all depends on where ya're a' standin' when ya're a' lookin' at a thing. Now take that cupola 'way up there. Looks pretty small from here, don't it? But if ya were right up t' it, ya'd find there's a lot more room than ya'd think.

"Well, I says, 'that's th' way it is with this here bizness. When ya get right int' it, ya'll find there's a whole lot t' it. Jest as ya say, I've been in it a right smart time, but I been a' learnin' something new every day, an' that's what counts. When ya stop learnin' there's jest two fellers ya got t' deal with. One gives ya little pills an' sends ya big bills, an' th' other helps t' build little marble an' granite villages out t' th' edge o' town.'"

LITTLE TIPS FROM "JIM DUNN"

Th' time t' figger profits is at th' beginnin' of th' season. If ya've got 'em figgered right then, they'll pan out all right at th' end of th' year.

If ya're dependin' on your prayers t' make a old belt hold out through th' rush season, th' chances are ya'll be a' sayin' 'em with swear words afore th' rush is over.

Th' difference between a real elevator man an' a "Try-it-once" is that th' first one usely sticks an' th' other one mostly allus gets stuck.

There's a few grain men this year, anyhow, that figgers a good bit o' their profits is "a' comin' thru th' rye."

Where will ya find a bizness with more ups an' downs in it than th' elevator bizness?

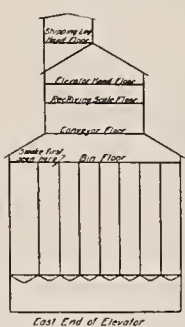
If a trade paper doesn't help ya in your bizness, why, of course, there's only one thing t' do: get out of your bizness.

Allus be on good terms with your compet'er. Take a interest in his bizness. Take th' whole interest if ya can.

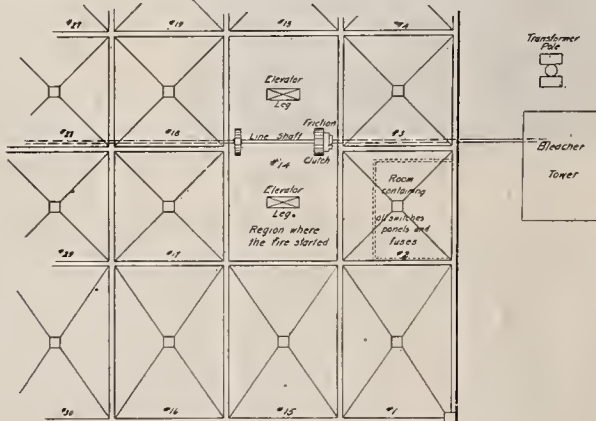
Don't worry. If th' wheat's tough ya're sure t' find it out—either when ya're a' takin' it in, or later when it's taken out o' your account sales.

Allus give your customers all that's a' comin' t' them. Some require more than others, but th' law an' th' price o' shoe leather won't allow ya t' give it t' 'em.

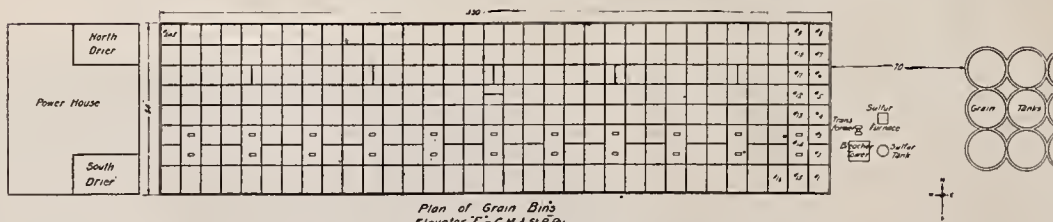
THE abundance of hay is shown by the large crop of 95,100,000 tons, or more than the average of 85,800,000 tons. Much of the hay is found where corn production is considerably below the average, and in such a situation hay may be fed more than usual. Oats are also abundant in the corn belt, and will be available as a substitute feed.



East End of Elevator



Plan of Bins—Southeast Corner of Elevator



Plan of Grain Bins Elevator C-M & S P Ry

DETAILS OF THE PLANT IN GROUND PLAN AND ELEVATION

yet evidence gathered in the investigation points to such a conclusion. Smoke was seen coming from the leg on the third floor and an odor like that of burning rubber was detected by the superintendent. Although the flame that ignited the dust flashed from windows on an upper floor, smoke, the first indication of an unusual condition, was observed on the east end of the work house floor.

Whether the fire was caused by defective electric

a tightening up on grades was evident to them as well as to the local elevator man. They were, however, unable to present concrete evidence that the grading was not in conformity to type samples. The position taken by Commissioner Snow, and George Hill, Dominion Government grain inspectors, was that the grading this year so far had been done on last year's samples, for the simple reason that, owing to the weather, it has been impossible for the chief inspector to produce

Price Movements and Speculation

Data Compiled Under Direction of the Federal Government Furnishes Basis for Analysis of Speculative Field

By J. W. T. DUVEL*

I SHALL make an effort to give you something new. To present at least one phase of "futures" that you have not been able to get here; but which I hope may be of some help to you by way of furnishing an explanation of some of the price movements during the past few weeks that can be applied in connection with your price forecasting in the future. I refer primarily to "Open Contracts." But before getting into that part of the discussion, permit me to say a few words with reference to daily volume of trading.

DAILY VOLUME OF TRADING

Since January 3, 1924, the Grain Futures Administration has given out each day at noon the volume of trading, one side only, for the preceding day on the Board of Trade of the City of Chicago. At the present time, similar figures are available for the trading on the Kansas City Board of Trade, the Minneapolis Chamber of Commerce, and the Duluth Board of Trade. These figures have been made available under authority contained in the Grain Futures Act in the hopes of bringing about a better understanding on the part of the general public as to the operations and functions of grain futures markets. I am confident that you have found this information helpful in your work here as students, as well as in your trading operations.

Within a few days we should have from the press a bulletin showing the daily volume of trading by grades on the Chicago Board of Trade during the period from January 1921 to May 1923 inclusive. This, in connection with the reports issued daily, will give you a record of nearly four years for comparative purposes.

OPEN CONTRACTS

During the past 10 months the public has had opportunity to become familiar with the daily volume of trading and to study the effects of the fluctuations in volume from day to day. So far, however, but little has been said concerning the extent of the open contracts. These have remained an unknown quantity so far as the Board as a whole is concerned. However, the open contracts have a far greater significance by way of indicating what is taking place in the market than is revealed by the daily volume of trading. With the exception of a careful examination of individual accounts, the variations in the open contracts tell the best story of market trends and activities. It is possible that a real service might be rendered by making these figures public each day so that they could be considered along with the volume of trading and other market information. On October 10, 1924, the Grain Futures Administration released a brief statement showing the total of all contracts open on the books of the clearing members of the Chicago Board of Trade at the beginning and at the end of September, together with the high, low and average.

This afternoon I am going to give you something more in detail. I have prepared a chart covering the period of July, August and September, 1924, showing the daily volume of sales and the total open contracts for all wheat futures combined, together with the opening, high, low and closing prices for May wheat. From this data you should be able to deduce something of value in connection with price movements.

For the sake of simplicity the May wheat price curve has been used for the whole of this period, even though at no time during the period did the volume of trading in May wheat predominate. It moved, however, concurrently with the September and December futures. In the diagram the daily volume and the open contracts are represented by but one side of the transactions. For the volume we use sales, there being, of course, an equal

volume of purchases. In the open contracts we use the "short" side, there being an equal number of contracts open on the "long" side. More correctly speaking, the total open contracts would be just double the quantity represented. Moreover, the figures here presented on open contracts represent only the accounts open, one side only, on the books of the clearing members of the Chicago Board of Trade and do not represent the ultimate customers' open interest in that market. This is due to the fact that some of the accounts on the books of clearing members are of non-clearing commission houses which, in turn, have customers who may be either "long" or "short." Such open contracts, however, should ultimately be closed by a transaction through a clearing member if the rules are strictly adhered to.

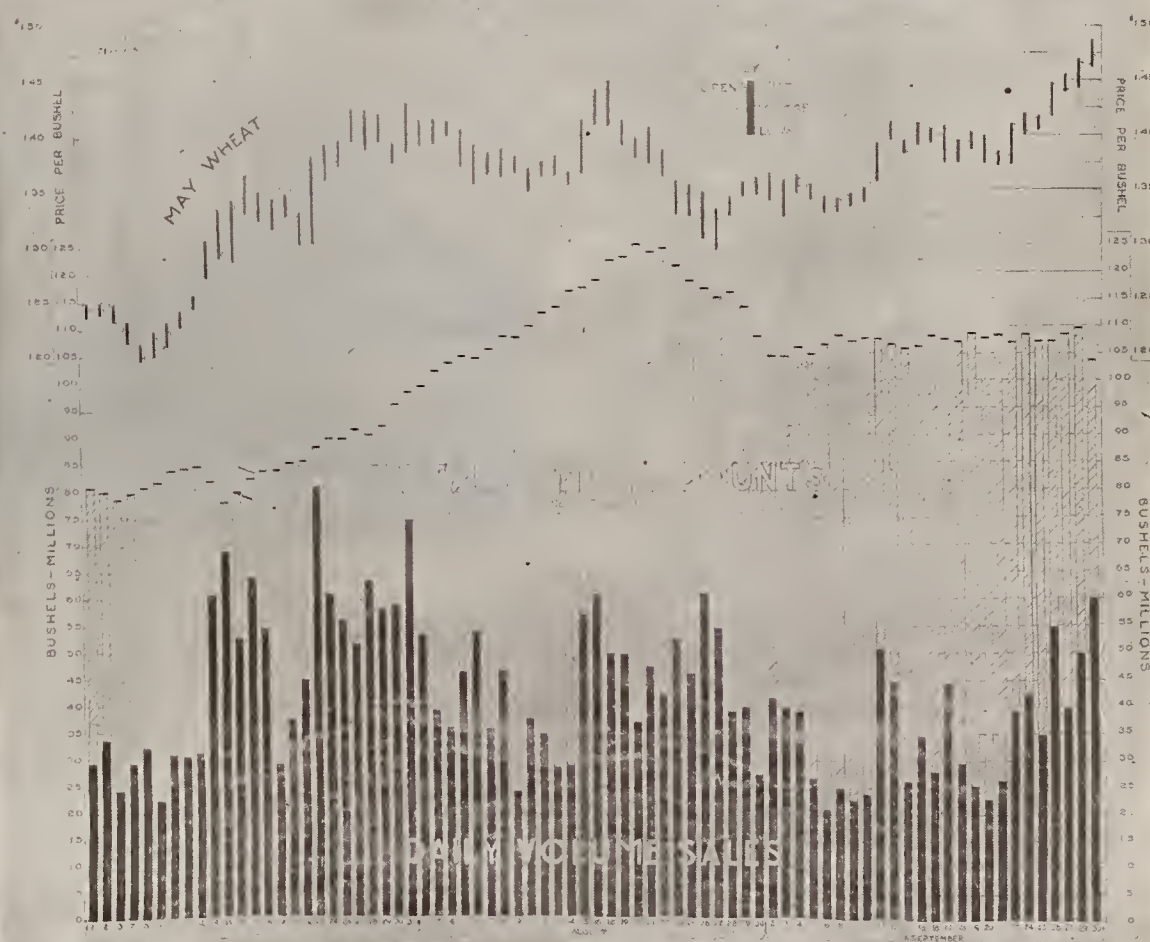
During the three-month period covered we have

and 62,251,000 in all wheat futures. The September future did not become dominant from the standpoint of open contracts until June 12, when September open contracts had increased to 30,208,000 and July had decreased to 27,059,000—the total open contracts in all wheat futures on that date being 63,566,000.

Passing to a comparison of the September and the December futures, the transition in the volume of trading, and in the relative standing of open contracts was made on the same day—August 15. On August 14, the trading in September wheat was 15,595,000 bushels against 10,542,000 bushels in December wheat. On the 15th the order was reversed to 18,488,000 and 32,490,000 respectively. The open September contracts on August 15 amounted to 49,880,000 bushels and the open December contracts 50,039,000 bushels with a total in all wheat futures of 117,203,000. The day previous, August 14, the open contracts in September and December wheat were 52,858,000 and 47,226,000 respectively. The total for all wheat futures on the 14th was 116,622,000 bushels, as shown on the chart.

In all of the cases cited the transition was clear-cut on a single day. This is usually the case in

DAILY VOLUME OF TRADING AND TOTAL OPEN ACCOUNTS, ALL WHEAT FUTURES, ONE SIDE ONLY, AS REPORTED BY CLEARING MEMBERS, CHICAGO BOARD OF TRADE, WITH OPENING, HIGH, LOW AND CLOSING PRICES FOR MAY WHEAT.



two delivery months—July and September. As a delivery month approaches the trading in that future naturally declines very rapidly with a corresponding increase in the more distant futures. This change in volume of trading usually takes place, in case of wheat, sometime between the 10th and the 25th of the month preceding the delivery month. As a general rule the dominating future, from the "open contracts" standpoint, switches about the same time. The latter, however, varies considerably and is a much more important factor in determining the technical position of the market as we approach a major delivery month.

With reference to the volume of trading, the switch from July to September was made on June 10. On the previous day the trades in July wheat amounted to 5,564,000 bushels against 2,832,000 bushels in September wheat. Whereas, on June 10, the volume in July wheat was 17,086,000 bushels, and in September wheat 17,515,000 bushels. On the following day the figures were 18,793,000 and 21,378,000 respectively. The open contracts in July wheat on June 10 amounted to 32,088,000 against 25,353,000 in September wheat

wheat, but there have been a few exceptions during the past four years.

The maximum open contracts in September wheat on any single day covered 54,081,000 bushels, on July 10. The aggregate of the open contracts in all wheat futures on that date was 84,122,000 bushels. At the close of business on August 30, the open contracts in the September future had decreased to 19,578,000 bushels, with an aggregate for all futures of 108,179,000 bushels. During the month the trading in the September future amounted to 40,000,000 bushels. The deliveries, including redeliveries were 12,017,000 bushels. Throughout the life of the September future, nine months, the total volume of the trades in September wheat was 1,838,308,000 bushels.

As a further help I am presenting some figures showing the average aggregate open contracts for the three months indicated on the chart, with comparative figures for the same months last year.

	1924	1923
Open contracts		
Average for July	85,532,000	82,501,000
Average for August	113,673,000	99,869,000
Average for September	107,051,000	95,361,000

For the three months combined the open con-

*From an address by J. W. T. Duvel, grain exchange supervisor for the United States Department of Agriculture, delivered October 30, 1924 to the College of Scientific Price Forecasting, Chicago.

THE AMERICAN ELEVATOR AND GRAIN TRADE

Forty-Third Year

ELEVATOR SPECIALIZES IN BEANS

By C. HYDE

tracts in all wheat futures aggregate 103,000,000 in 1924 and 94,000,000 in 1923. Perhaps a smaller variation than you had anticipated, in view of the wide difference in the character of the markets during these two periods.

Giving more special consideration to the chart we find that on July 14, the volume of trading jumped to 60,859,000 bushels, or nearly double the volume of the preceding day. The market closed nearly five cents higher. The open contracts dropped from 84,942,000 to 82,237,000 bushels, a decrease of approximately two and three-quarter million. The "longs" evidently took some good profits at this point and the "shorts" some losses. On July 15 the daily volume in all wheat futures was 69,171,000. While the market closed one cent lower, the high of the session was three cents above the previous close. The open contracts showed a further decline of four million bushels, to a total of only 78,218,000. More profit for the "longs" and more losses for the "shorts," were so effected.

From this time until August 20, there was a gradual but irregular increase in open contracts, reaching a high point for the three-month period of 125,046,000 bushels. This was about the period of heaviest movement from the country and the visible supply, as a natural consequence, was increasing rapidly.

On August 18, short selling, made easy by hedging pressure, began to make itself felt. The open contracts increased from 118,594,000 at the close on the 16th to 122,240,000 at the close on the 18th, 122,961,000 on the 19th and 125,046,000 on the 20th. On the 23rd, further selling carried the market into stop-loss orders, which was followed by liquidation and a decline in the open interests of nearly four million from the high on August 20. This continued until August 27 with a further decline in open contracts to 115,367,000 or nearly 10,000,000 in six days. The open contracts showed a further decline until September 3, when they registered 104,506,000. During the month of September there was but little change in the volume of open contracts, although the price ranged from a low of \$1.32½ on September 3 to \$1.48½ on September 30.

FLUCTUATIONS

The period since the beginning of the present crop year may be characterized by frequent wide daily fluctuations. During the three-month period shown on the chart there were seven days on which the market moved through a range of more than four cents. These dates were July 15, 16, 23 and 31; August 15, 18 and 26. The widest daily range was eight cents on July 23. The total number of trading days during this period was 76, making a daily fluctuation of more than four cents on approximately 10 per cent of the total trading days. In addition to the daily fluctuations the market closed four cents higher or lower than the previous close, on six different days; July 14, 16, 18 and 23, August 15 and September 11. While these wide movements were mostly upward, violent changes of this character are, as a general rule, not justified by supply and demand. If you will study these movements in connection with the open contracts and daily volume of trading, you should understand why it is impossible for forecasts to run true to form at all times. You will also understand why some of the market gossip occasionally presents an erroneous picture, either through ignorance or intent, of what has taken place.

As we study these unnatural, and usually unwarranted price movements, a serious question arises as to the good or harm they do to the entire structure of future trading, and to the institutions through which such trading is made possible. It has been suggested that a limited range through which prices of grain futures might move in any one day would serve a useful purpose. While I am not ready to commit myself to either side of this question, I do believe that the exchanges could well afford to give it serious thought. It has worked admirably on the cotton exchanges where it has been put into use.

In the little town of Springport, Mich., on the New York Central right of way, there is conducted a large business enterprise, in a rather unpretentious environment. It is an elevator which was built 20 years ago by Bert Bridenstine, and is called the Storm Center Elevator, the origin of which is rather unique and interesting. It is said to have started from the sudden impulse of a certain traveling salesman from Fort Wayne, Ind., to get off the train and investigate the place on account of its peculiar name.

This man had seen the country from Connecticut to the shores of the Great Lakes, traveling in the interests of a large wholesale grocery firm, and was one of more than 30 men covering territory for that company. He walked up and down through the town, liked its wide shady streets, and stepped into the store owned by E. C. Comstock. He and Mr. Comstock developed a mutual interest in the course of conversation and he accepted an invitation to dinner, during which they discussed business. The salesman remained all night, as there was no train out till the following day; and when he left Mr. Comstock had agreed to help furnish cleaned beans to the wholesale house at Fort Wayne, as this locality was productive of a fine quality of beans.

Mr. Comstock made arrangements for women to



STORM CENTER ELEVATOR, SPRINGPORT, MICH.

pick over beans at his store, and soon had to fit up a larger space upstairs. Then it became necessary to provide still larger accommodations; and so through the influence of a traveling salesman (a Mr. Safford) they formed a stock company of six members. Several of these associates were wealthy men from Indiana and the equipment of the small elevator was as complete as money could supply. Mr. Comstock was designated as manager at Springport.

Twice they have added to the size of the building and they now claim one of the largest bean and grain industries in the State of Michigan, and it is still growing. The elevator is entirely covered with iron sheathing to protect it from railroad fire hazards, and it has a storage capacity of 30,000 bushels, in six bins. The receiving, shipping and cleaning capacity is 1,500 bushels. Equipment includes a Clipper Grain Cleaner and gasoline power is used. At first it also supplied lighting facilities but since city power has provided a 24-hour service, this has been changed. The horsepower required is 50, and a belt drive is used. Three Howe Scales are used. The elevator handles wheat, rye, oats, beans, grain seeds, and in addition, feeds.

The grain is loaded by means of galvanized chutes, and the beans in bags run down a belt and pulley car from the upper story. About 50 women and 10 men are employed in the handling of beans only. An unusual mechanism separates the black rough coated beans from the white ones, and these in turn are sent down via belts to the women who still further eliminate the undesirable. They are paid by the weight of dirt they can accumulate from this process, and some make excellent wages.

The cleaned beans are sold in five-pound lots from the wholesale house in Fort Wayne.

This year, from August 1, until the third week in September, the elevator shipped out 16 carloads of beans, a part of the year's business. It handles on the average 7,500 bushels of grain, and increases the output each year, and now upwards of 30,000 bushels of beans. The bean industry has become a general business and for many counties around the farmers are putting in their yearly crop of beans, having found that it pays much better than wheat. This elevator maintains an increasing business, and with the strong company back of it, calculates to become the biggest bean and grain elevator in the State of Michigan. It has been a great benefit to the farmers and many others who raise a crop of beans besides their other business pursuits.

PERSONNEL OF AGRICULTURAL COMMISSION

President Coolidge has recently designated the personnel of the commission to investigate agricultural conditions, and hopes to have legislative recommendations before him in time for action at the coming short session of Congress.

Robert D. Carey of Careyhurst, Wyo., is chairman and is a former governor of Wyoming. Other members include O. E. Bradfute, president of the American Farm Bureau Federation of Chicago; Charles S. Barrett, Chairman of the National Board of Farm Organizations of Union City, Ga.; Louis J. Taber, Master of the National Grange of Columbus, Ohio; Ralph P. Merritt of Fresno, Calif., president of Sun Maid Raisin Growers; R. W. Thatcher, director of the New York Experiment Station of Geneva, N. Y.; W. C. Coffey, dean of the College of Agriculture and director of the experiment station of the University of Minnesota; and Fred H. Bixby, president of the American National Live Stock Association of Long Beach, Calif.

PROPOSED ARGENTINE CONTROL ACT

A bill which has been submitted by the Argentine Minister of Agriculture to Congress, provides for the establishment of official standards for each product as well as standard types of containers therefor, and the creation of a commission made up of three members to be known as the Agricultural Trade Control Commission, which would be charged with the enforcement of the law. The proposed legislation looks toward the control by the Government of commerce in agricultural products, for the purpose of preventing and suppressing monopolies and other acts prejudicial to the agricultural interests of the country.

The executive would also be authorized to construct grain elevators and public warehouses at seaports, railway terminals, and elsewhere, funds necessary for the purpose to be obtained by the issuance of bonds in a sum not to exceed 50,000,000 pesos paper. They would also be empowered to turn over to private companies the construction and exploitation of the elevators under a guarantee of a profit of 6 per cent per annum for a period of 10 years.

INCREASE IN AGRICULTURAL EXPORTS

In the month of September exports of agricultural products from the United States were greater in volume than in any previous month since September, 1921. The increase is attributable to the beginning of shipments from the new crops of wheat and cotton, and is to a large extent seasonal, although this year the seasonal increase is greater than usual because the exportable surplus of both cotton and wheat is expected to be larger than last year. In commenting, the Department of Agriculture says, in part:

"Wheat exports in September amounted to 32,-

662,000 bushels, as compared with 15,408,000 bushels in September, 1923, an increase of 17,254,000 bushels, or 112 per cent. Exports of wheat flour in terms of grain, however, were only 7,000,000 bushels in September, as compared with 14,400,000 bushels in September, 1923. Rye exports amounted to 11,560,000 bushels, as compared with 2,560,000

bushels in the same month last year. This increase in the exports of bread grains appears even more important when it is considered that the export price of wheat in September, 1924, was \$1.36, as compared with \$1.12 a year ago, and the export price of rye \$1.23 as compared with 95 cents last year."

Hints for the Elevator Millwright

"Big Bill" Davis Gets An "Angle Board" and Does Something New in Repairing Vise-Screws

By OLD TIMER

SOME changes were being made at Mr. Marston's "Square Deal" Elevator at Massaboag Lake, and the head millwright, William Davis, or "Big Bill" as he was affectionately called by his many friends, had been passed, the word to "put on a couple more millwrights" for a few weeks. Several applicants had been "turned down" by Mr. Davis who did not fancy the personal appearance of the men. Two more had been sent away because of unsatisfactory answers to the first question asked of them:—"What tools have you got?"

One man who was hired by Mr. Davis, named over a fine assortment of tools—all a man would ever have need of, and then ended the list by mentioning an "angle-board." "What's that?" said Mr. Davis, and the millwright replied that it was a bit of board 12 inches square from which he could lay out almost any spout angle called for, and with the board, he could measure pretty closely the angle of any spout in the elevator or on a drawing.

"I want to see that board," said Big Bill. "I have been looking a long time for some contraption with which I can guess at spout angles closer than I can with a three-inch brass protractor which comes with some 'sets' of drawing instruments." "Here's that angle-board," said millwright Warren, next day, as he was unpacking his kit of tools. He handed out a well smoothed and shellacked piece of soft wood 12 inches square, with lines drawn upon it, one inch apart as shown by Fig. 1.

In reply to questions as to how he made and used the angle-board, Mr. Warren said he laid off the lines one inch apart, from the bottom, then numbered each line as shown, 0, 1, 2, 3, 4, etc. The next step, was to reduce the inches to decimals

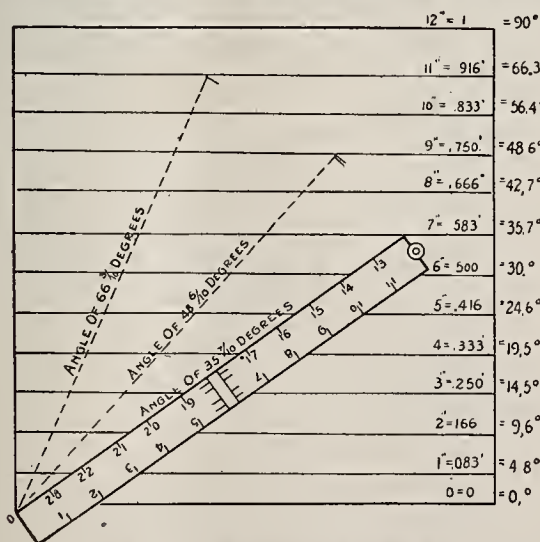


FIG. 1. WARNER'S ANGLE-BOARD

of a foot, which was done by dividing each by 12, giving the decimals of a foot in the second column: 1 = .083, 2 = .166, etc. "Then," said Mr. Warner, "I looked up these decimals in a table of natural sines, which can be found in almost any engineer's reference book. The numbers found in the table, as having sines of .083, .166, etc., were written just to the right of the second column and were found to belong to angles of 4.8 degrees, 9.6 degrees, etc., up to 90.

Then Mr. Warner took his 12-inch rule and placed it on the board with one corner touching the left lower corner of the board, at 0, and the other end of the rule exactly fair with one of the inch lines. "There," said he, "along the upper edge of the rule, is an angle of 35 7/10 degrees with the lower

edge of the board—close enough to 35 degrees for most millwright purposes. If I place the rule as shown by the dotted lines, it will lie at 48 6/10 degrees, 66 3/10, so, with this angle-board, I can set a bevel to almost any angle required, except those near 90, which are not very accurately located by this tool. But for small angles, it is mighty handy."

Big Bill looked the board over closely, then made up one for himself. But, instead of using a

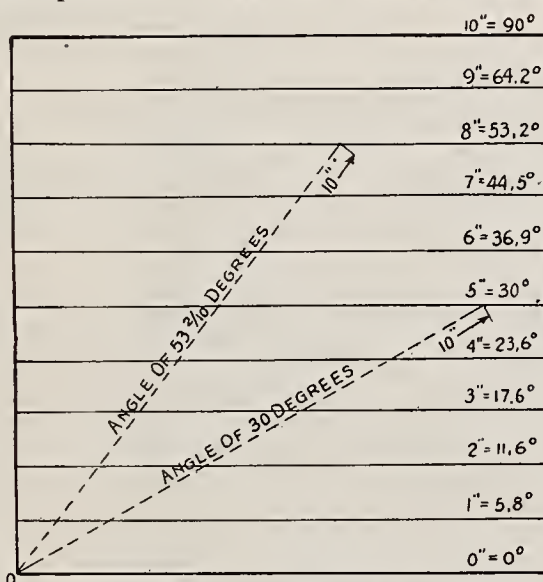


FIG. 2. TEN-INCH ANGLE-BOARD

12-inch board and ruling 12 lines on it, he made a board 10-inches square, with 10 one-inch lines accurately located as shown by Fig. 2. This prevented the necessity of changing the inches to decimals of a foot, and the angles 1 = 5.8, 2 = 11.6 were taken direct from a table of natural sines. This board was used exactly the same as Mr. Warner's board, except instead of laying on a 12-inch rule from corner 0, to one of the inch lines, 10 inches were thus laid off instead of 12, as shown by the dotted lines which indicate angles of 30 degrees and 53 2/10 degrees respectively.

These angle-boards are very handy, and save a lot of time now and then. But any millwright who desires to make up a tool of this kind, may improve greatly upon those shown by Fig. 1 and 2, and that too, with little or no more work than is required to make the angle-boards described above. Such an improved angle-board is shown by Fig. 3, and carries by "fives" all the angles between 0 and 90 degrees.

Before proceeding to lay out the angle-board shown by Fig. 3, let it be understood that it is by no means necessary to use a board 10 inches square. The board may be much larger than that size, and the lines need not begin one inch from the bottom. Neither is it at all necessary to begin the rule laying-on at any particular corner which may or may not be marked 0. Draw a line from any portion of the zero line, to one of the other lines, and as long as the drawn line is, 10 inches in length, that line will form the angle with the base or zero line, which is given on the board at the mark to which the 10-inch line is drawn.

The lines representing angles may be drawn inclined to the left if that be more convenient than to draw them inclined to the right, as in Figs. 1, 2 and 3. To establish the horizontal lines representing each fifth degree angle, look in the table of natural sines and note that the sine of 5 degrees is, in the nearest common fraction, 7/8. There-

fore, lay down the 5 degree line 7/8-inch from the bottom edge of the board or from a zero line, which may or may not be on the edge of the angle-board.

Next, take out the sine for 10 degrees. Its nearest common fraction is 1 3/4 so lay down a 10-degree line that distance from the zero line of the board. So continue to lay down lines for every fifth degree up to 90. It may be noted that the lines as laid down are closer and closer together as they approach the 90 degree line, and for this reason, great accuracy must be secured in laying down these high degree angle lines upon the board.

Perhaps it may be desirable to make a larger board so as to use a longer radius than 10 inches. If so, use 20 inch instead of 10, for "reaching" for any angle from the zero line to where that angle is laid upon its horizontal line. It will also be necessary, when laying down each horizontal line, to double the sine found in the table for any degree, and to lay down each line to the doubled distance. For instance, lay down the five-degree line 1 3/4-inches from the zero line, instead of 7/8-inch as shown by Fig. 3.

Thus, on an enlarged angle-board, it will be possible to lay down horizontal working lines which may be two degrees apart, instead of five degrees as shown by Fig. 3, and some portions of the board, where necessary, may be ruled for single degrees, as required. A very striking similarity in all three of the angle-boards pictured above, is in the fact that the 30-degree line is always in the middle of the board. This, if kept in mind, makes it very easy to lay off 30 and 60 degree angles at any time, with a steel square such as is in use by every millwright.

"Square up" from the straight edge of a board, any convenient distance, and from the top of that line, place the blade of the square so it will touch the edge of the board at twice the distance of the vertical line's length. Mark along the square from top of vertical line to edge of the board, and the two lines and edge of the board will enclose a triangle having angles of 30, 60, and 90 degrees.

* * *

Big Bill took one of the new millwrights to the shop and set him at work, fitting up a lot of heavy

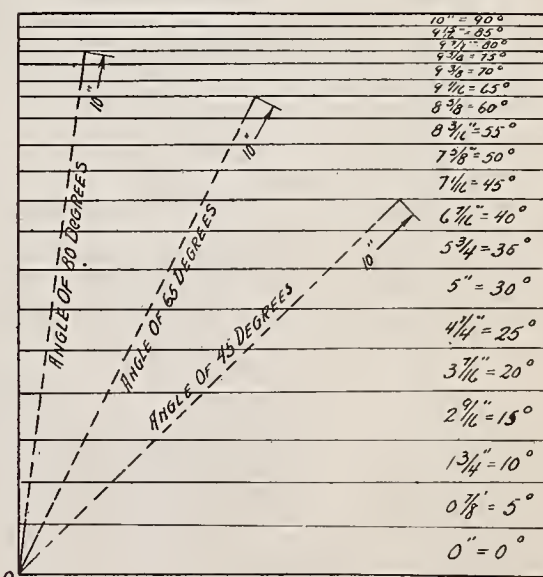


FIG. 3—EVEN ANGLE BOARD

bolts and rods. Some of the old bolts had nuts rusted fast, and Bill told the millwright that it might be best to "break" the rust in the threads by heating the nuts in the forge fire and then screw the nuts off while they were hot. There was a big brute of a leg-vise in the shop and the millwright was directed to use that tool for holding the bolts and rods while removing the nuts therefrom—after the rods had been heated, if necessary.

Mr. Davis noticed that the millwright "yanked" mighty hard on the vise handle, when he tightened the vise-jaws on some of the heavy rods. Bill didn't say anything, but kept watch out of the "tail of his eye" and pretty soon saw the millwright slip a three-foot piece of steam pipe over the vise handle, and "yank" on the pipe, putting an

enormous stress upon the vise jaws and screw. Big Bill started for the vise as soon as he saw the pipe-leverage being worked, and just as he got there, the millwright screwed another big bolt into the vise, gave a lusty pull on the pipe-lever, when "snap" went something and the millwright piled up on the floor in a heap, taking the vise, screw with him.

Excessive pressure had stripped the screw-thread out of the sheath, which was almost as smooth as the inside of a journal bearing. Mr. Davis searched out a small square rod of cold-rolled machinery steel, heated the rod and wound it around the vise screw to form a new thread for the sheath. The new thread was carefully opened and closed until it could be driven snugly into the sheath while wrapped around the vise screw. Mr. Davis then shook a lot of fine spelter and pul-

verized borax into the sheath, replaced the screw and took a bright yellow brazing-heat on the whole business, sheath, screw and the coiled up thread. When the spelter melted and began to "run," Mr. Davis had one man hold the sheath, another man back out the screw carefully and quickly, while he, with a dipper of water, followed along the sheath as fast as the screw was backed out, and water-cooled the sheath enough that the new thread "stuck" position where cooled by the stream of water.

As soon as the screw had been removed—before it could "set" in the sheath, Big Bill cooled the sheath as fast as he dared, by scattering water on it here and there, and as soon as the hand could be borne on the sheath, it was replaced in the vise, the screw inserted and the tool was ready for use again—time:—a little more than one hour.

Grades Deliverable on Contract

A Tabulation of Regulations on Contract Grades at All Future Markets in the Country

THE Grain Futures Administration, at Chicago, has recently compiled a booklet containing information on the grades of grain and flaxseed deliverable on contracts for future delivery. The 10 grain exchanges designated as "contract markets" are covered, i.e., Chicago (both Board of Trade and the Open Board of Trade), Minneapolis, Kansas City, Milwaukee, St. Louis, Duluth, Baltimore, San Francisco and Los Angeles.

Transactions on the Winnipeg Grain Exchange are not subject to the provisions of the Grain Futures Act. However, the grades deliverable at Winnipeg are listed in the Government leaflet as a matter of convenience, as Winnipeg is the only other market in North America trading in grain futures. Transactions at Winnipeg are on the basis of delivery in store at Fort William or Port Arthur.

The Chicago Open Board has provided by general rule the same contract grades that apply to the Board of Trade of the City of Chicago, and where any delivery contract calls for the delivery

of a stipulated grade or quality, such grade or quality is to be determined according to the rules, by-laws and regulations of the Board of Trade of the City of Chicago.

When the term No. 2 Corn is used by the trade it refers to No. 2 Mixed Corn as designated by the Federal Grades under the Grain Standards Act. White or Yellow Corn of the same numerical grade usually commands a premium over No. 2 Mixed Corn.

The Duluth Board of Trade is the only contract market that trades in Durum wheat futures; and Minneapolis Chamber of Commerce and Duluth Board are the only contract markets in the United States authorized to trade in flaxseed futures.

Minneapolis and Duluth have contract grades for Winter wheat contracts. However, all contracts unless otherwise specified refer to Spring wheat contracts.

Los Angeles is designated as a contract market for barley, corn and Kafir, but at present is trading

in barley futures only. The San Francisco Market is designated as a contract market for barley only. Futures contracts for grain at Los Angeles and San Francisco are known as "time contracts." The unit of trading at these two points is 100 tons, whereas, 5,000 bushels is generally understood as the unit at all other markets.

The greatest number of grades of grain deliverable at contract price (all markets) is on Winter wheat contracts at Duluth, where 14 grades are deliverable. The largest premium given to any grain (all markets) is 4 cents which is applied on the grade of Hard Spring wheat in Minneapolis and Duluth. The largest discount (all markets, all grains) is in Duluth, where No. 3 Dark Northern Spring wheat and No. 3 Northern Spring wheat are discounted 18 cents and 20 cents respectively. No grain grading No. 3 (all grains, all markets) is deliverable at contract price except in Kansas City, where No. 3 White oats (testing 26 pounds or better) is deliverable, and in Minneapolis where No. 3 White corn and No. 3 Yellow corn are deliverable at contract price. Baltimore delivers No. 3 White corn, No. 3 Yellow corn and No. 3 Mixed corn at the contract price. Winnipeg permits No. 3 Canada Western barley to be delivered at contract price.

Virtually all of the contract markets have instituted in their rules and by-laws the equivalent of the following rule which is quoted from the rules of the Board of Trade of the City of Chicago: "On contracts for grain or flaxseed for future delivery the tender of a higher grade of the same kind of grain or flaxseed shall be deemed sufficient."

The following tabulation has been compiled from the data presented in the Government leaflet:

Contract Price in cents designated "C." Over contract price "O." Under contract price "U."	Chicago	Minneapolis ⁴	Kansas City ⁸	Milwaukee	St. Louis ⁹	Duluth ¹⁴	Baltimore
Wheat							
No. 1 Dark Northern Spring.....	1½ O	2 O	..	1½ O	..	2 O	..
No. 2 Dark Northern Spring.....	½ O	1 U	..	½ O	..	1 U	..
No. 3 Dark Northern Spring.....	8 U	..	..	8 U	..	18 U	..
No. 1 Northern Spring.....	C	C ¹	..	C	..	C ¹	..
No. 2 Northern Spring.....	C	3 U	..	C	..	3 U	..
No. 3 Northern Spring.....	8 U	..	..	8 U	..	20 U	..
No. 1 Dark Hard Winter.....	1½ O	C	C	1½ O	C	C	..
No. 2 Dark Hard Winter.....	½ O	..	..	½ O	..	C	..
No. 3 Dark Hard Winter.....	5 U	5 U	5 U	5 U	5 U	5 U	..
No. 1 Hard Winter.....	C	C	C	C	C	C	..
No. 2 Hard Winter.....	C ¹	C ¹	C ¹	C ¹	C	C ¹	..
No. 3 Hard Winter.....	5 U	5 U	5 U	5 U	5 U	5 U	..
No. 1 Yellow Hard Winter.....	C	C	C	C	C	C	..
No. 2 Yellow Hard Winter.....	C ¹	5 U	C	C ¹	C	C	..
No. 3 Yellow Hard Winter.....	5 U	..	5 U	5 U	5 U	5 U	..
No. 1 Red Winter.....	C	..	..	C	C	C	C ¹⁵
No. 2 Red Winter.....	C ¹	..	..	C ¹	C ¹	C	16C ¹
No. 3 Red Winter.....	5 U	..	..	5 U	5 U	5 U	..
Corn							
No. 1 White.....	½ O	½ O	C	½ O	C	..	C
No. 2 White.....	½ O	½ O	C	½ O	C	..	C
No. 3 White.....	2 U	C	2½ U	2 U	2 U ¹⁰	..	C
No. 4 White.....	4½ U ²	4½ U	..	4½ U ²	..	..	C
No. 1 Yellow.....	½ O	½ O	C	½ O	..	..	C
No. 2 Yellow.....	½ O	½ O	C	½ O	C	..	C
No. 3 Yellow.....	2 U	C ¹	2½ U	2 U	2 U ¹⁰	..	C
No. 4 Yellow.....	4½ U	4½ U	..	4½ U	..	..	C
No. 1 Mixed.....	C	C	C	C	C	..	C
No. 2 Mixed.....	C ¹	C	C ¹	C ¹	C ¹	..	C
No. 3 Mixed.....	2½ U	2½ U	2½ U	2½ U	2 U ¹⁰	..	C ¹
No. 4 Mixed.....	5 U	5 U ⁵	..	5 U	..	..	..
Oats							
No. 1 White.....	½ O	½ O	½ O	½ O	C	..	..
No. 2 White.....	C ¹	C ¹	½ O	C ¹	C ¹	..	..
No. 3 White.....	1½ U	1½ U	1C ⁶	1½ U	1½ U	..	..
Rye							
No. 1.....	C	C	..	..	..	..	..
No. 2.....	C ¹	C ¹	..	C ¹	..	C ¹	..
No. 3.....	5 U	3 U	..	5 U	..	3 U	..
Barley							
No. 1.....	C	C	..	..	..	..	..
No. 2.....	C ¹	C ¹	..	C ¹	..	C ¹	..
No. 3.....	7 U	7 U	..	7 U	..	5 U	..
No. 1 Bay Brewing.....	C	..	..	..	..	..	..
No. 2 Bay Brewing.....	C	..	..	..	..	..	..
No. 3 Bay Brewing.....	7 U	..	..	..	..	..	..
No. 1 Chevalier.....	C	..	..	..	..	..	..
No. 2 Chevalier.....	C	..	..	..	..	..	..
No. 3 Chevalier.....	7 U	..	..	..	..	..	..
No. 3 Bay Brewing Mixed.....	9 U	..	..	..	..	..	..
No. 3 Chevalier Mixed.....	9 U	..	..	..	..	..	..
Flaxseed							
No. 1.....	3	C ¹	..	..	..	1 C ¹²	..
No. 1 Northwestern.....	..	C	..	..	..	..	..

Wheat	Winnipeg
No. 1 Manitoba Northern.....	C ¹
No. 2 Manitoba Northern.....	3 U
No. 3 Manitoba Northern.....	8 U
Oats	
No. 2 Canada Western.....	C ¹
No. 3 Canada Western.....	3 U
Extra No. 1 Feed.....	3 U
No. 1 Feed.....	5 U
Barley	
No. 3 Canada Western.....	C ¹
No. 4 Canada Western.....	5 U
Rye	
No. 1 Canada Western.....	C
No. 2 Canada Western.....	C ¹
Flax	
No. 1 Northwestern Canada.....	C ¹
No. 2 Canada Western.....	4 U

Wheat	Duluth ¹¹
No. 1 Amber Durum.....	2 O
No. 2 Amber Durum.....	C ¹
No. 3 Amber Durum.....	4 U
No. 1 Durum.....	C
No. 2 Durum.....	2 U
No. 3 Durum.....	6 U
No. 1 Mixed Durum.....	4 U
No. 2 Mixed Durum.....	6 U

Wheat	Duluth	Minneapolis
No. 1 Hard Spring.....	4 O	4 O
No. 1 Red Spring.....	..	..
No. 2 Red Spring.....	..	..
No. 3 Red Spring.....	..	..
No. 1 Hard White.....	5 U	..
No. 2 Hard White.....	5 U	..

Kafir Corn	Kansas City
No. 2 White.....	C ¹
No. 3 White.....	1½ U
No. 2 Milo Maize.....	3 U
No. 3 Milo Maize.....	4½ U
No. 2 Feterita.....	3 U
No. 3 Feterita.....	4½ U
No. 2 Mixed.....	3 U
No. 3 Mixed.....	4½ U ⁷

NOTES

1. Contract grades that are generally understood as basic and in some markets are definitely so designated.

2. Any No. 4 corn, either White, Yellow, or Mixed, may be delivered provided that it can be delivered only during the months of November, December, January and February.

3. On contracts for grain or flaxseed for future delivery the tender of a higher grade of the same kind of grain or flaxseed than the one contracted for shall be deemed sufficient.

4. Unless otherwise specified all offers (Minneapolis Chamber of Commerce) to buy or sell wheat for future

delivery shall be understood to refer to the Spring wheat future.

5. Provided that No. 4 corn of the new crop can be delivered only during the months of November, December, January and February. Provided further, that No. 4 corn, whose moisture content does not exceed the maximum required for No. 3 corn, may be delivered on contract during the balance of the year, but in no case shall more than 25 per cent of No. 4 corn be applied on contract during any time of the year.

6. Testing 26 pounds or better.
7. Consisting of Kafir corn, milo maize and Feterita.
8. Deliveries of grades (all grains) may be made in such proportions as may be convenient to the seller subject, however, to the provisions of section XIV, article XIII; section VII, article XIV; and section XX, article XIII, of the Constitution, Rules and Regulations of the Board of Trade of the City of Kansas City, Mo.

9. Nothing shall be construed as permitting the delivery of Hard Winter wheat or contracts made for Red Winter wheat; nor shall it be permitted to deliver Red Winter wheat on contracts made for Hard Winter wheat.

10. No. 3 White corn, No. 3 Yellow corn and No. 3 Mixed corn cannot be delivered during the months of March, April and May, except at four cents per bushel under contract price.

11. Duluth is the only market trading in Durum wheat for future delivery. Practically all transactions in wheat futures at Duluth are in Durum wheat.

12. Any flaxseed wherever grown that shall be graded No. 1 shall be deliverable at contract price, in Duluth. No. 2 flaxseed, wherever grown is deliverable at a penalty of 2 per cent of the contract price.

13. On sales for year delivery, the seller may, in the same manner, deliver, at the same price, new and/or old crop natural and/or dried corn of the grades enumerated herein.

14. No. 1 Dark Northern Spring, No. 2 Dark Northern Spring, No. 1 Northern Spring, No. 2 Northern Spring, No. 1 Red Spring, and No. 2 Red Spring are deliverable at contract price on Winter wheat. No. 3 Dark Northern Spring, No. 3 Northern Spring, No. 3 Red Spring are deliverable at eight cent discount on Winter wheat contract.

15. May be garley.

San Francisco

In San Francisco, in making deliveries on "time contracts" of No. 1 Feed barley, seller shall have the right to deliver in lots of 2,000 centals either No. 1 Bright Feed barley or No. 1 Dark Feed barley. Should No. 1 Dark Feed barley be delivered, seller shall allow to buyer 5 cents per cental. All contracts made for the future delivery of inspected grain . . . shall be known as "time contracts." Unless otherwise specified all offers to buy or sell grain shall be in lots of 100 tons.

All deliveries of grain upon "time contracts" or upon spot sales of inspected produce must be made in warehouses designated as "regular" as defined in Rule X, unless otherwise expressly agreed upon, and shall be made by tender of regular negotiable warehouse receipts, which receipts shall be issued by such warehouses as are in all respects conformable to the requirements prescribed by the Committee on Grain, and shall have attached thereto the certificate of the inspector, giving the grade or quality and weight and number of sacks of the property to be delivered, and the date of inspection. All such warehouse receipts shall be made to run at least five (5) days from the date of such delivery, free of storage charges; regular or customary storage charges shall follow such receipt and be chargeable upon the property; provided that on barley or wheat delivered after May 31, 1923, in any regular warehouse not located in San Francisco, the seller on making delivery shall deduct from the price at which the contract stands, the railroad freight rate prevailing at the time of delivery, from such warehouse to San Francisco, unless the parties have specifically agreed otherwise and provided that on wheat and barley delivered in regular warehouses in Stockton on or prior to May 31, 1923, the seller on making delivery shall deduct 4½ cents per cental from the price at which the contract stands, except that when delivery in Stockton is specified in the contract no deduction shall be made, and provided further that on feed barley delivered in regular warehouses, at Port Costa, Crockett and South Vallejo on or before May 31, 1923, the seller upon making delivery shall deduct three (3) cents per cental from the price at which the contract stands.

Los Angeles

In Los Angeles the transactions on contract barley shall be on the basis of No. 2 Feed, as established by the California Department of Agriculture, unless otherwise specified at time of sale or purchase.

Rule 24, Section 1, provides that "all sales or purchases of any commodity made between members of the Los Angeles Grain Exchange for future delivery for 100-ton lots shall be known as 'time contracts.'"

Rule 25 states that "effective on and after April 21, 1924, Board sales transactions for contract sacked barley must be made for delivery in approved public warehouses within the State of California. Transactions shall be consummated on warehouse receipts with all rail freight charges, seasons' storage and loading out charges paid or allowed by the seller. The seller shall furnish warehouse receipts sufficient to fill the contract covering barley in the same warehouse. When making tender, the seller shall furnish the buyer a Los Angeles

Grain Exchange inspection certificate on each lot tendered."

Amendment to Rule 25, May 1, 1924, says, "In any event, when deliveries of contract barley are made, the buyer shall be allowed not less than 10 days' free storage from date of delivery and that freight rates governing delivery shall mean all rail shipment and that buyer shall be protected against any change of freight rates for a period of not less than 10 days from date of delivery."

Public warehouses which hold charters from the State of California, shall be designated by the State Railroad Commission.

Winnipeg

In delivering wheat, oats, or barley, a higher grade than the contract grade may be delivered at the contract price.

GRAIN SEPARATION

At a recent meeting of the Manchester Association of Engineers, Manchester, Eng., Cecil Bentham, an engineer of prominence, read a paper on the "Separation of Materials." Mr. Bentham is connected with the milling engineering firm of Henry Simon, Ltd., and has had a large acquaintance with the problems and mechanical means of grain separation. In part, Mr. Bentham said:

Everyone is acquainted with the common hand

first separated from the plants on which they have grown and some process of separation is imperative; consequently, world-wide attention has been given to the problem and it naturally preponderates in such a paper as this.

The first illustration is taken from an assembly of grains, etc., such as is met with in common practice, and it will be noticed that grain of one class varies very considerably in size; thus, wheat berries may be from 0.13 to 0.3 inches long with proportionate girths. This figure indicates the complexity of the problem, and it will be evident from a careful study that separation by size cannot be completely effective.

As illustrations of separation by shape, Mr. Bentham instanced the use of cylinders with indentations on the internal cylindrical surface. He explained the recent development of the indented discs, now in extensive use in the United States.

After speaking of the separation of foreign substances from grain by utilizing differences in specific gravity, instancing the use of water to take out stones and other heavy matter, Mr. Bentham passed on to separation dependent on texture. This separation is dependent on a combination of properties of the material to be separated,

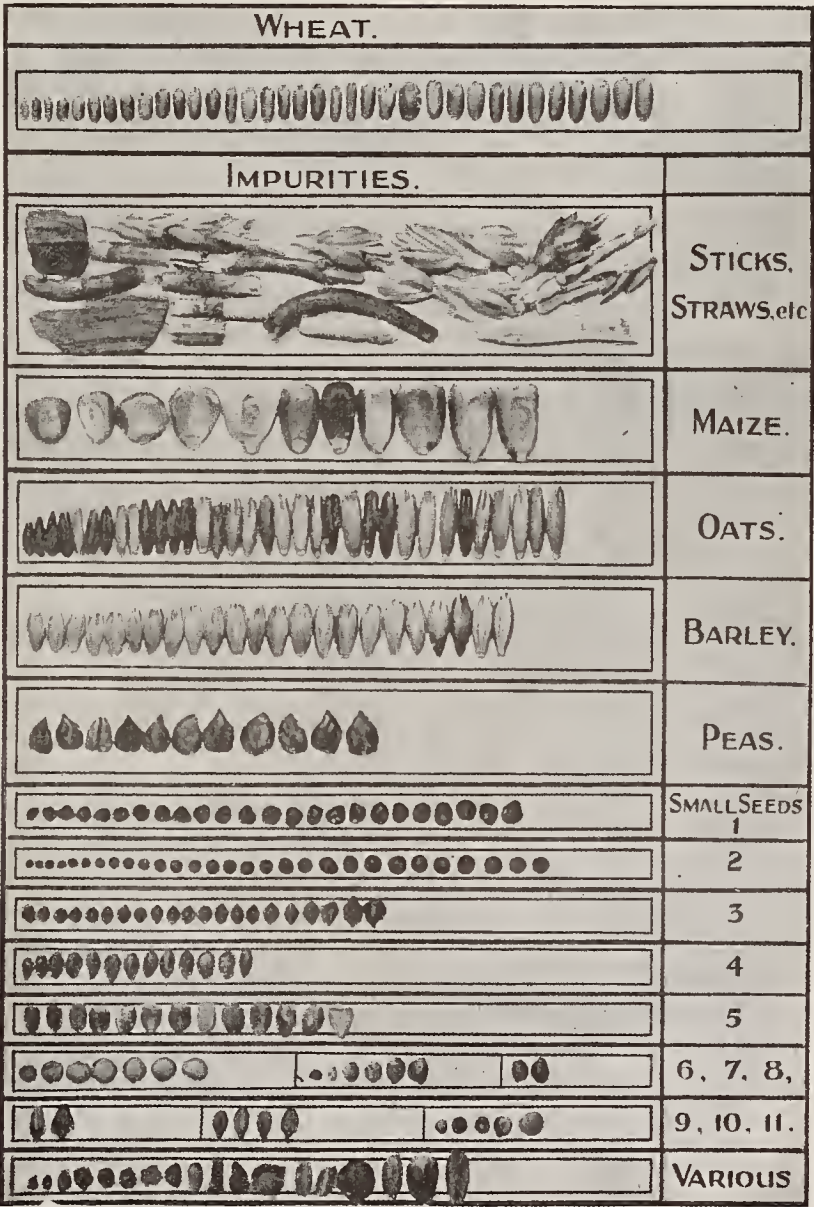


EXHIBIT OF WHEAT BERRIES AND SOME TYPICAL IMPURITIES

riddle, and leaving quantity out of the question, it is evident that this must be one of the most efficacious methods of separating by size. It is astounding the number of attempts made to imitate by mechanical means various motions of the hand riddle. These are uniform straight line backwards, forwards or sideways, rotary in horizontal or vertical planes, jarring, and various combinations. The difficulty mechanically has been to get all these effects combined or at will, though approximation of each one may be obtained separately.

The separation of grain by size presents problems more involved than the separation of coal, stone, etc. With grain, the object is primarily to separate one kind of grain from another, and not essentially to divide into sizes. Grain and seeds are always mixed with one another in some combination, or with foreign substances, when they are

which have been classified broadly as texture. These properties may result in variations of specific gravity, variations of the surface and the structure of the particles. The separation is usually effected by means of a current of air. The principle of the separation is not perhaps quite so definite as in the previous cases dealt with, but excellent work can be done. The second illustration shows the material which is extracted from wheat by applying air currents of different velocities. A careful study of this figure shows the difficulty of making exact separations. For instance, if an air current is applied of 1,000 feet per minute velocity (this being the highest which does not lift out some useful wheat), some foreign matter is left in the wheat, but a higher velocity lifts some good wheat, so it is evident there is a quantity of intermediate material which cannot be separated.



Published on the Fifteenth of Each Month
BY

Mitchell Brothers Publishing Co.

OFFICE:

**Manhattan Building, 431 South Dearborn St.
CHICAGO, ILL.**

A. J. MITCHELL.....Business Manager

Subscription Price - - - - \$1.00 per Year
English and Foreign Subscription 1.75 " "

ADVERTISING.

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CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

Official Paper of the Grain Dealers National Association and of the Illinois Grain Dealers Association

CHICAGO, ILL., NOVEMBER 15, 1924

A SECRETARY OF AGRICULTURE

PRESIDENT COOLIDGE has asked a great many people to advise him in regard to the selection of a Secretary of Agriculture to fill the vacancy caused by the recent death of Henry C. Wallace. The position is far harder to fill than it used to be, and for that reason the greater care should be exercised in picking the man for the job. After the President has received the various suggestions, he will pick out, we hope, a man fitted for the position and not one who will best serve the interests of the man or group of men who suggested him.

The ideal man would not be a politician, nor one who is identified with any of the economic cure-alls which have been getting so much publicity lately. Most of the names which have been given newspaper prominence fall into one or the other of these classes. Without meaning to criticize former secretaries on this account, the ideal would not be an editor or publisher of a farm journal. While this training gives him an exceptional opportunity for learning farm conditions and the best agricultural practices, it also makes it incumbent upon him to take an editorial stand on all issues, and such a stand, even with the most honest intention, is formulated with one eye on the subscription list.

The ideal man is one who knows farming and economics; who cannot be carried off his feet by temporary conditions, nor who can be unduly influenced by politicians in or out of the department. This is a large order, but it is to be hoped that President Coolidge

can fill it successfully, and that the right man will accept when tendered the office.

Here is the list of candidates that have been mentioned, not seeking the job necessarily, but as possibilities: L. J. Tabor of Ohio, J. W. Coverdale of Chicago, Arthur C. Page of Chicago, Frank O. Lowden of Illinois, J. R. Howard and A. Sykes of Iowa, and Harvey J. Sconce of Illinois. In the east Dr. Arthur W. Gilbert of Massachusetts, Samuel Adams of Virginia, and Howard M. Gore of West Virginia are being boosted for the office. The eastern men can be eliminated, as can those of political or economic fame of the wild goose variety. There remains L. J. Tabor and J. R. Howard, both with actual farm experience, both as organization leaders, and both with sound and independent viewpoints on many subjects. But whoever goes in should understand that cooperative marketing is not an end in itself, but merely one of several means to an end.

A BROADCASTING CONFERENCE

A CONFERENCE of interest to many grain dealers will be held at Chicago on December 4. It will consider some of the problems that have arisen in radio broadcasting crop news, market reports and educational matter for farmers. Most of the grain dealers with receiving sets, and there are few without them, depend for their information on stations serving the various grain exchanges rather than on the Federal or state departments of agriculture, but, as market reports will have a place on the program of the conference, the exchanges will doubtless be asked to sit in and consider the rules for control of this and other broadcast news.

The radio service has been of inestimable benefit to the grain trade as well as to the farmers. In no other way could authentic market news be sent out so cheaply and efficiently and the half-hourly reports are received regularly in hundreds of grain offices throughout the country. It is to be hoped that the Department of Agriculture, in making up its program to furnish news to the farmers, will not attempt to curtail or delay the service now given by the exchanges. W. C. Warburton, director of extension, U. S. Department of Agriculture, will preside at the conference.

FOUR YEARS MORE

REGARDLESS of what your normal political affiliations may be, there is a marked degree of satisfaction for every grain dealer in the outcome of the election. President Coolidge has expressed himself forcibly as opposed to the growing tendency of Government interference in private affairs. His program of strict economy may also limit the number of useless investigations by committees and commissions, and this will save money for the Government and do away with endless trouble by business firms.

The teeth of the farm bloc have been drawn. This group of men was instrumental in broadcasting about as much misinfor-

mation relating to the marketing of grain as their active imaginations were capable of conceiving. The overwhelming endorsement of constructive but sane policies has made any attempt at inimical legislation improbable and it appears as though the trade would have a chance for progress and development instead of dissipating its entire energy in defense. There is little danger of the trade standing still. Economic changes of considerable importance seems inevitable and the trade will have its hands full in adjusting itself to these changes. But this will be along the line of constructive endeavor and not a fight with our backs to the wall.

ASSOCIATION

DURING the past month the Ohio Grain Dealers Association held a series of district meetings, pretty well covering the state, and affording an opportunity for dealers to get together for the discussion of general or strictly local problems without sacrifice of much time or effort in travel. Such meetings serve an association well, for a competitor who is a friend is quite a different proposition than one who is a stranger. A district meeting is the best place in the world to find out that your competitor is not the pirate, the highwayman, the desperado that you suspected, but rather an honest, hard working man like yourself, trying to make a living just as you are.

When you meet him under the friendly auspices of the association you will find it an easy matter to smooth out the misunderstandings which were causing distress; and more often than not you will find that reports of his extravagant offers for grain or ruinous prices of feed or other sidelines were largely myths whose origin was in the imagination of a close fisted farmer. Attend your district meeting and learn what "association" really means.

GET ACQUAINTED

HERE is something for grain dealers to think about. It comes from a man not in the grain business at all, but he couldn't have spoken to better purpose if he had been in it all his life. W. H. Barr, president of the National Founders Association, is the man, and this is what he said:

I have come to the conclusion that you cannot blame men and women for being antagonistic to institutions which deliberately ignore them, which do exercise a certain tremendous power, and which they have been led to believe exercise that power selfishly even if not malignantly. The people of this country want to know the truth, to know the facts, to be asked to determine their position by the facts and by the truth. They resent the indifference and the isolation which industry and finance heretofore have surrounded themselves with, and they are really in a state of mind that makes it easy for the radical and the blatant humbug to impose on their credulity, stories that have neither foundation in fact nor the slightest justification in any way.

Both the country grain dealer and the terminal market operators are equally at fault in this respect. Both have felt secure in the knowledge that they were performing a necessary part of the world's work of distri-

bution and doing it at the lowest possible cost. They have dismissed the silly charges of demagogues and radical organizers as being unworthy of an answer, so the demagogues have gone on talking without opposition and have made a great many people believe that their economic fallacies were truth and righteousness to the last word.

The various grain exchanges have been doing more educational and publicity work in the last year than ever before and this work is beginning to show results although any definite progress will take time as the agitators have a head start of years and this handicap cannot be made up in a few months.

As for the country dealers, some of them have taken their communities into their confidence and have established the friendliest feeling and a cordial and mutual good will, while others have merely sulked under attack and have kept silent and withdrawn largely from local activities. This course has been suicidal in hundreds of instances and will put hundreds more out of business if persisted in. The country shipper is doing a wonderful work in his neighborhood and doing it as cheaply as it can possibly be done, often cheaper than it should be done. He should make these facts known and believed by every member of the community; instead of being under suspicion he should have the widest confidence; instead of being a clam he should be the most communicative and the best advertised man in town.

Spend some money for advertising, but not too much. There are lots of ways to get publicity without paying for it. Does your local paper carry news stories of record loads of grain brought to your elevator? This produces rivalry among the farmers and the local elevators would eat it up. Hardly a day passes during the busy season but something of news interest happens at the elevator. Watch out for it and send it in to the local editor, a telephone will do it and the editor will write it up. Keep before your public in a friendly way and you will find the public your friend.

A THOUGHT FOR DREAMERS

AUSTRALIA is a long way off and it is difficult for us in this country to get just the right viewpoint at the strange mixture of socialism, communism and trade unionism which contends for the control of Government. But a recent action in respect to the compulsory wheat pool there is significant and has a direct bearing on the attempts to create monopolistic wheat pools in this country.

The Compulsory Wheat Pool Bill passed the Assembly, or lower house, of the state of Victoria. The bill provided for a monopoly of the wheat and a domestic price high enough to take care of any losses incurred in exporting the surplus. In a general way along the lines of the late lamented McNary-Haugen bill in this country. The Council, or upper house, however, defeated the bill by a vote of 17 to 13. The Council vote represented the voice of the trade unions, or, as we would say, labor. Labor would not stand

for being gouged for the benefit of another group in the commonwealth.

This is a situation which the dreamers of a world-wide wheat pool evidently have not taken into consideration. In every country the consumers outnumber the producers, for the producers themselves are consumers. If a wheat monopoly threatened to unduly increase the cost of living, the consumers will join together to destroy the monopoly. Of course the dreamers say that the pressure would be too gentle to cause any such revolutionary move. It didn't prove so in Australia, and it will give the dreamers something to think about.

EDITORIAL MENTION

The quality of the corn crop this year is the lowest in recent years. Preliminary returns for November by the Department of Agriculture give 2,478,000,000 bushels for the crop, which is an increase of 19,000,000 bushels over the indications a month ago. Farm resources of old corn November 1 were 101,634,000 bushels.

Every grain dealer who observes a car of grain leaking in transit, should report the car number and the nature of the leak to the secretary of his state association or to some other agency. This journal will be glad to publish all such reports sent in. It may help a brother dealer in his claim against the railroad.

Learning from the experience of elevators at the Canadian Head of the Lakes, the Harbor Commission of Vancouver has made a ruling that all screenings uncalled for after 45 days from the issuance of warehouse receipt, may be sold by the Commission. Screenings take up a lot of valuable space and Vancouver has none to spare.

The wheat header is rapidly taking the place of the binder in the Northwest. The header is more wasteful of grain, but it saves time and labor, and those items are far more important on the large grain ranches. The headers in use are not the combination threshing outfit. The latter provides an additional problem, the sweating of the grain after rather than before threshing.

On November 11 December rye was within 6½ cents of December wheat, 60-pound basis. This is the nearest those bread grains have been together in several years. About half of our exportable surplus of rye has been shipped, and the balance will hardly meet normal requirements. Somewhere there is a limit to what Europe will pay, but that "limit" has strangely elastic qualities when hunger threatens.

Professor James E. Boyle of Cornell University recently pointed out the futility, as a general practice, of holding grain off the market for a possible higher price later on: "In the five crops, 1919 to 1923, market prices showed a gain one year by holding wheat

until spring, an even break one year, and a loss three years." But it is a safe bet that these statistics will mean nothing to the crowd who have made the phrase "orderly marketing" a shibboleth.

Vessel agents complain that there are so many large boats bidding for grain cargoes between Canadian and United States ports and Europe that all the profit has been taken out of the carrying trade. Exporters with grain parcels ready to load can often pick up bargains in space, but on the other hand the vessel with a high-freight package manifesto can put in grain as ballast and be ahead on the deal. So both sides win.

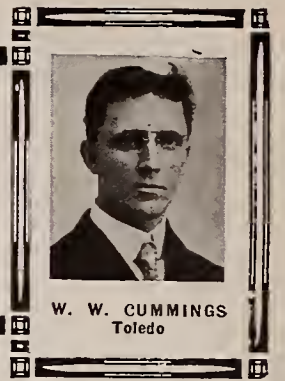
The growing importance of the South as a grain and hay market is indicated in the demand which comes from Charlotte, N. C., for a hay inspector and a licensed grain inspector. There are 22 mills within 50 miles of Charlotte and a great deal of grain passes through the town each year. Obviously an inspector, qualified to grade both hay and grain, would have his time well filled and the fees would make the position worth while. The Southern States are coming forward rapidly as important units in the manufacturing wealth of the country.

Our mail order houses have their fingers on the farm pulse, and their count of the beat is generally pretty accurate. The latest report is to the effect that farm conditions are greatly improved, but are not as bullish as the general public have been led to believe. Mail orders may not be as plentiful as were expected, but haven't our merchant friends overlooked a very large frozen bank loan which has been liquidated? If the farmer is paying his debts instead of buying new phonographs and motor cars, then the country is on the road to a safe and sane period of prosperity without the jazzy frills that mean over-expansion and danger.

The Canadian Government, through the press, is making an effort to "sell" the provincial and Federal departments of agriculture to the people. In new territory where the virgin soil needs only to be turned to give abundantly, it is difficult to make farmers realize their dependence upon science. In older countries farmers have learned that the bounties of Nature must be husbanded and economized. As a youngster among nations, Canada is in a position to learn one thing by the experience of this and other countries: Information must be given in interesting form to reach any great number of persons. No matter how much valuable data a pamphlet may have, unless the story is told in an interesting way the paper in the bulletin is utter waste. Any program of education, whether agricultural or what-not, should have trained, interesting writers to present the findings of the scientists. This observation is not directed particularly at the Canadian department. So far as we know, Sir Gilbert Parker or Stephen Leacock may be writing its bulletins. The observation is general and applies to most presentations of scientific work in almost every country.

G. C. MARTIN, JR.
St. Louis

NEWS OF THE TERMINAL MARKETS

W. W. CUMMINGS
Toledo

GOOD DEMAND FOR WHEAT AND CORN

We still have good demand here for all wheat of milling character and do not hesitate to urge its consignment.

The demand is good also for all arrivals of corn. We feel that our corn market will continue to maintain its advantageous price position and that it will be your best outlet.

Our arrivals of oats continue very light with all finding good sales at satisfactory prices. We feel that this market would easily stand some increase in receipts and suggest consignments now.—*Bert A. Boyd Grain Company, Indianapolis, Ind. Market Letter of November 13.*

WOULD SELL OLD CORN

Our market continues the upward trend as others are doing.

Receipts of wheat are light; demand moderate, but sufficient to care for all that comes. We are inclined to go very slow at this time, prices are at top point and the advance has been very rapid lately. Would think it wise to accept profits at least for the present.

Corn market is strong. Think consignments of new corn will prove the best for present. Would sell old corn as fast as it accumulated.

Oats steady and expect them to hold well for spot, as receipts are light and demand very good.—*H. E. Kinney Grain Company, Indianapolis, Ind. Market Letter of November 13.*

EXPECT IMPROVED DEMAND

The cash demand for all grains has been very slow in this market, during the past month. Both the local and interior trade have been well stocked with supplies and the mild weather has curtailed consumption of all kinds of feed.

With the uncertainty of election out of the way and more seasonable weather prevailing, there has been some improvement in the demand the past few days and a gradual improvement is expected to occur as the weather becomes colder.

Receipts of grain by rail have been extremely light but arrivals by lake have been of great volume. The amount of grain elevated from vessels in this port exceeds by several million bushels the largest amount previously handled in any one season at the corresponding date. The bulk of this grain is moving right through to the seaboard for export and this record breaking movement is expected to continue right up until the close of lake navigation.—*J. G. McKillen, Inc., Buffalo, N. Y. Market Letter of November 12.*

MORE THAN TEN PER CENT IN "SHOW WINDOW"

One month ago Argentine and Australia were credited with an exportable surplus of around 300,000,000 bushels wheat. At that time the world's situation was considered as closely adjusted. Today the surplus of these countries is estimated at about 200,000,000 bushels with possibilities of a further reduction. Let it be said that American wheat is still by far the cheapest wheat in the world. It is on the bargain counter and finding ready buyers. So why should one become impressed with the big visible stocks? More than 10 per cent of our crop is in the "show window." Receipts are decreasing and a continued broad demand is bound to lead to the moment when the excess demand over the receipts

must be filled from the "show window." Vast quantities of wheat have left the Southwest. Kansas millers are now said to experience difficulty in securing sufficient supplies for requirements. We are convinced that the general situation is one of exceptional merit. We can see no sustained let up in the demand and anticipate ultimately higher prices as a result of this season's relative supply and demand position.—*Bartlett Frazier Co., Chicago, Ill. From Market Letter of November 12.*

GEORGE H. MILLER

As a reminder of the present protection given to country shipper's grain, on arrival in the different railroad yards in Chicago in comparison to former times, it may be recalled that 20 to 25 years ago grain thieves operated with remarkable boldness. It was not unusual for the grain thieves



GEORGE H. MILLER

of those days to back their wagon to the car of country grain, standing in the railway yard, break the car seal, fill their wagon with the grain and drive away with it. This wholesale stealing of grain, however, is now entirely done away with. Only once in a while, in spite of close watch of the railway yards, a thief is able to steal a bag or two of grain. In the majority of these cases, the thieves are apprehended, taken to the lockup to await trial in the courts.

The many services afforded to the country grain shipper by the Chicago Board of Trade includes the patrolling of the railway yards of the lines entering, Chicago and this work is performed under the direction of Chief Special Agent of the Weighing Department of the Chicago Board of Trade, George H. Miller, whose portrait accompanies this sketch.

Mr. Miller has served the Board in the capacity of special agent for the past 25 years, having been appointed to the office by the late chief weighmaster, H. A. Foss in 1900. It is his duty to look after all the grain arriving in Chicago at the various yards until it is unloaded into the elevator. Several men assist him in this work. If grain is stolen and the thief apprehended, which generally

follows, Mr. Miller is present in court when the case is tried to see that he is duly prosecuted. As the result of Mr. Miller's activities the Chicago terminal is said to be more closely guarded than any other in the country.

In the matter of securing payment of claims for stolen grain, Mr. Miller's office is most helpful. Formerly, claims on this account were very slow in being paid. Today if grain is stolen from a car, Mr. Miller at once notifies the special agent and the claim agent of the railroad in whose yard the robbery occurs. When later, the consignee of the grain, forwards his claim to the railroad for payment, a settlement is usually made in a very short time.

Mr. Miller was born in New York City and removed to Chicago 40 years ago. He was formerly connected with the Martin White Detective Agency; he left that concern to accept his present position. He is also secretary and treasurer of the Chicago Railway Special Agents and Police Association which brings him in close contact with the police departments of all the railroads entering Chicago.

On December 9 this association will hold its annual banquet at the Auditorium Hotel which will be attended by the Mayor of Chicago, Chief of Police, Sheriff of Cook County, State's Attorney, judges of the criminal courts, and captains of the various police precincts. J. Hamilton Lewis will preside as toastmaster and officials of various railroads will also be present.

It may be said in closing that Mr. Miller is eminently fitted for the position which he holds in the Chicago Board of Trade Weighing Department. He has rare tact and excellent judgment and in the case of juvenile offenders can temper justice with mercy. No man, it is stated, stands higher in the esteem and confidence of the railway special agents of the Chicago district.

THE WHEAT SITUATION

The features of the wheat situation of the past month has been, reduced prospects in the Southern Hemisphere (Argentine and Australia) heavy marketings and exports of United States wheat, and confirmation of poor quality of Canadian wheat. These influences caused prices to advance to the highest levels of the season. A month ago Broomhall estimated Argentine would have an exportable surplus of 144,000,000 against 180,000,000 last year. Now current estimates vary between 90,000,000 and 110,000,000. Likewise a month ago Broomhall estimated Australian crop 136,000,000 against 125,000,000 last year and exportable surplus 86,000,000 against 70,000,000 last year. Recently the Australian crop has been injured by excessive rains, and crop and surplus is now expected to fall below last year. Canadian farm deliveries have been running about half as large as a year ago, and only 62 per cent is contract grade. This is disappointing to foreign buyers.

In the United States, primary movement July 1 to date has been enormous, 322,000,000 against 196,000,000 in like period last year, a gain of 126,000,000, whereas the crop this year is officially estimated only 80,000,000 larger. Where has this increase gone? The visible gain over last year accounts for 15,000,000 of it; the increase in exports over last year accounts for 35,000,000, leaving 76,000,000 of the 126,000,000 increase in primary receipts to be otherwise accounted for. Apparently the domestic consumption is heavier than last year, or than usual. Reports from our crop reporters indicate that farm-

ers had marketed 67 per cent of their crop by November 1; a year ago the estimate was 58 per cent; we interpret this as indicating farm wheat holdings November 1, (excluding farm seed requirements) to be 210,000,000 compared with 265,000,000 a year ago. Statistically, the wheat situation is strong.—*Nat. C. Murray, Statistician with Clement, Curtis & Co., Chicago, Ill. Market Letter of November 13.*

IN THE MOVIES

The Pennsylvania Railroad Company recently had completed by a motion picture firm, a series of films depicting in detail the various operations of receiving and loading grain and the general terminal facilities at its large grain elevator at Canton, Baltimore, Md. The pictures include also a number of panoramic views of the railroad's entire Baltimore Harbor frontage taken from the top of the elevator. It is planned to exhibit the pictures throughout the United States for educational purposes.

LIGHT RECEIPTS FROM COUNTRY POINTS

The trade in coarse grains during the past few weeks has been very light. It is the general opinion that we will not see a brisk domestic business until we get some cold weather in the Eastern territory. On account of elevator conditions in all markets there has been corn and oats offered for immediate shipment below replacement values. This condition no doubt will change within a few days on account of light receipts from country points. The movement from country points to Buffalo has been light, but enough to take care of the limited demand. Prevailing prices are about in line with all offerings from western markets.—*McConnell Grain Corporation, Buffalo, N. Y. Market Letter of November 13.*

LET US HAVE AN EFFICIENT SECRETARY OF AGRICULTURE

W. N. Eckhardt, president of Pope & Eckhardt Co., a leading grain receiving house of Chicago, Ill., writes us under date of November 5 as follows:

"Now that the election is over and the strength of the radical bloc seriously crippled, it might be wise to present views from the grain trade side, on the question of a successor to the late Henry C. Wallace.

"We also want to call your attention to the enclosed copy—first two paragraphs, i. e., extracts from a letter from our representative in Iowa. We have written him that recommendations from the good people in Iowa would be more effective than from the grain trade in the terminals; nevertheless, we appreciate that those people interested in distribution of grain, whether in the terminals or at points over the country, also are vitally interested in having an efficient Secretary of Agriculture. That, therefore, it would not be amiss if the trade did take some action to bring to that Department a business administration that would give attention to 'the business' of farming, and less to the marketing, which needs a very different talent. That farming is a business will be accepted by everybody who gives it a moment's thought. Farming, i. e., the production of crops and the saving of crops, ought, in our humble opinion, be given much more attention than has in recent years been given it.

"Therefore, the views expressed in this letter from Mr. Smith, may lead to a line of action that will do much to relieve grain trade and farmers of political buncum in the future."

Mr. Smith's letter was as follows:

Was very glad you sent the two statements covering the Dawes plan and taxation. Some people out here appreciate the bigness of it and again, especially farmers, have not the slightest idea of what it is, or how highly important its working reflects in their betterment. The press throughout all the towns and cities have carried on a very good campaign in their efforts to educate the "non-thinkers" politically, but not a great deal of space has been given to this plan.

There are a few words the writer would like to state relative to these people in the farming districts of this state who have suffered losses in the past few

years. In them is a feeling of distrust, hatred and vindictiveness against all good, safe, sound government. The professional business men and women, and big interests of our large eastern cities, also our Government have been mighty liberal in caring for the many requests of this western body who have caused so much trouble in the past few years. In guiding their destinies to success, you gentlemen in Chicago might as well endeavor to guide some radical labor organization to prosperity and satisfy them—for it cannot be done. With these few words of facts before you, it is to be sincerely hoped that President Coolidge and Mr. Dawes will place the Department of Agriculture on a business and not a political basis for the next few years. The writer has not written a line of politics to the firm since this campaign has been on and it is hoped you will not take offense in so doing on the last day. For the welfare of the farmer and all people of this state, tomorrow is our great opportunity to eliminate this man Brookhart.

The general feeling with farmers, merchants, practically all people is that Illinois also will have no new corn. It would do no good to tell them otherwise or read the facts relative to the new crop in your state, for the listeners would accept it with grave doubts. That is why the writer mentioned the other day, if there was a lack of "bull" corn speculators in the cities, there surely is no lacking of support in this state.

DEATH OF HIRAM N. SAGER

The grain trade of the country suffered a severe loss in the death of Hiram N. Sager, secretary and treasurer of J. H. Dole & Co., Chicago, which



THE LATE HIRAM N. SAGER

occurred October 29 at the Presbyterian Hospital. He had gone to the hospital a week previous for examination and observation as the result of an abdominal ailment and death followed. He was 65 years of age.

Not only had Mr. Sager been, for years, one of the recognized leaders of the grain trade in the central west, but he embodied in his character the careful, conservative type of business man. He always had in mind the interests of the great shipping public that finds a market in Chicago, and lent his aid in making the Chicago Board of Trade an institution of worth. Character and stability during the troublesome times when it was assailed by demagogues, and harassed by the radical element in government. He was a logical and eloquent speaker and often represented the Board's interests before committees at Washington and was a popular speaker during the war on matters of national defense and interests. No one heard Mr. Sager without being impressed by his sincerity and earnestness in the course he avowed.

Mr. Sager was born June 20, 1859, in Liverpool, England. He came to this country with his family in 1866 and his education was obtained from the University of Wisconsin. He was first associated with the milling firm of Norton & Co. of Chicago from 1884 to 1902 when he became secretary and manager of J. H. Dole & Co., a grain firm which

dates back to 1852. He had served as a director of the Board of Trade as well as on various committees and was president of the Board in 1907 and 1908. In 1911 he was elected president of the Council of North American Grain Exchanges. He had been a member of the Board since 1886.

Mr. Sager is survived by his widow and three daughters, Mrs. George T. Coleman, Mrs. Griffith Bixby and Miss Mildred E. Sager.

BARGE LINE ACTIVE

Recently one of the largest single cargoes of grain ever moved down the Mississippi River by barge line was carried from St. Louis to New Orleans for export. It included 375,000 bushels of wheat. Shipments of wheat by barges during October were 903,245 bushels, compared with only 129,600 the corresponding month in 1923.

LOOK FOR REACTIONS BEFORE BUYING

There is no question but what the statistical position of wheat is strong. The reduction of yields in the Southern Hemisphere is a very serious factor; however, the shortage in world's supplies will be discounted at a price and the market will probably advance on speculative buying considerably more than the situation warrants. We have in the visible, close to 95,000,000 bushels of wheat under day December wheat sold at 7 cents a bushel under the May, the widest difference so far. This is rather a bearish feature. The domestic flour trade shows very little improvement and the domestic demand for cash wheat is slow. The amount of wheat on passage is rather large and information to us indicates considerable amount of this wheat has been consigned abroad and will have to find buyers while in transit. There will be plenty of reactions in the market on which purchases can be made.—*C. A. King & Co., Toledo, Ohio. From Market Letter of November 12.*

QUALITY OF NEW CORN GOOD

Receipts of corn in this market recently have been moderate and prices have been following the trend of values in other markets. The demand from industrial sources has been very active, and the indications are for a continuation of same, and it looks as though there would be a material increase, as industries here are making arrangements for an increase in their capacity. There is considerable old corn back in the country, and the prospect is that this will be marketed at good prices. New corn has been coming on the market and so far the quality is very good, except that it contains considerable moisture. It has been bringing very good prices, and the demand for it has been very good. Now that the election is out of the way we believe the market will become more settled, and business on a more substantial basis.

Receipts of oats have been light; business for shipment is light, and the few cars arriving here are taken by local millers.—*Mueller Grain Company, Peoria, Ill. Market Letter of November 13.*

FAIR CORN CROP IN CENTRAL ILLINOIS

Thirty days have passed since any rain of consequence has visited us. Wheat came up very promptly after seeding to a good stand. Due to the fact that the soil at seeding time was full of moisture, one would judge that the plant generally has a good root growth, the portion above ground, however, has not increased much in size past two weeks. One good judge guessed the top growth of the wheat plant recently as two-thirds of normal.

Some think that the extra heavy movement of grain this fall has been induced by the belief that prices were being upheld by the party in power until after election. Those who believe that grain prices respond to the world's food requirements and not to political moves on the checkerboard, now have their innings as they note the present good advance in grains immediately following a general election.

Corn shucking is progressing rapidly, yield is

not as large in volume as some of the more enthusiastic farmers hereabouts looked for, but we have a good fair crop in Central Illinois, one that will stand a long journey in box cars safely after a little, and the money that it brings will give many farmers that contented look that won't wash off.

Corn stalks are generally standing straight up, making the gathering job an easy one and the going price to shuckers reasonable, viz., about five cents per bushel. There is but little anxiety here to rush new corn to market just yet. We will be disappointed if a goodly portion of our December run does not grade No. 3 this year. Oats are nicely hidden away awaiting the time when Mr. Fifty Cents will call them into action.—*H. I. Baldwin Co., Decatur, Ill. Late November Market Letter.*

GOOD RECEIPTS

Receipts of corn have been in excess of demand for the past week. Old corn continues to be offered quite freely but there is some noticeable decrease in the offerings. The demand has, however, been pretty well satisfied and the trade well filled up. Local corn is now in the market and many sections are having a harvest that a month ago held no hopes for a crop.

Receipts of oats have been more than ample and elevator stocks are heaviest in years. There does not seem to be much of an outlet for oats and the trade, generally speaking, is very unsatisfactory.

The wonderful pasture all over the eastern territory for the past six weeks has saved farmers considerable money. Local mills and feed plants all notice the decrease in the demand and almost every industry is loaded up on grain and in fact many of them reporting paying demurrage on cars that they cannot take into their plants.—*Harper Grain Company, Pittsburgh, Pa. Market Letter of November 12.*

CHANGES IN MEMBERSHIP

Chicago.—The memberships of the following on the Board of Trade have been transferred: Harold C. Hunt, Chas. E. Huntting, Jr., Henry W. Cohu, George W. Eddy, L. A. Hansel, Estate Jas. A. Taylor, Thos. W. Dudman, John W. Hatten, Robt. B. McClean, Arthur B. Larkin, Estate John W. Barkdull, Estate George R. Crowe, Howard H. Logan, John G. Beaty, Jas. R. Ness, H. Stanley Haskins, W. C. Erwin, Estate N. L. Moffitt, Thos. V. Brennan, Lewis F. Gifford and Patrick Brennan. The following were admitted to membership on the Board: John B. Gilfillan, Jr., Morris R. Glaser, Johannes L. Ravensway, Kurt J. Bartsch, James J. Williamson, William L. Heptig, Jr., George T. Moxley, George O. Stremmel, James P. Sledge, Edward R. O'Connell, John William Barkdull, Jr., James Alexander Crowe, William P. Stewart, Kenneth E. Womak, Joseph Walker, Lamar Fleming, Jr., Henry Markley Crosswell, Robert C. Napier, John K. Dorance, Chas. Allen Johnson, William D. Felder. J. M. Byrne, Jr., has been suspended from the Board. Reported by Secretary James J. Fones.

Duluth.—New members on the Board of Trade are: W. W. Moore, W. S. Moore, G. W. Sand, T. H. Welch, Julian B. Sein, F. J. Bisbee, W. W. Durham, John H. Allen, H. W. Wilson, Patrick Mallow, S. A. McPhail. The memberships of the following were withdrawn: J. F. Culhane, E. L. Glaser, J. H. McMillan, Jr., J. F. Bell, J. F. McCarthy. Reported by Secretary Chas. F. MacDonald.

Milwaukee.—John W. Engler has been elected to membership on the Chamber of Commerce and the membership of Lawrence J. Hessburg has been transferred. Reported by Secretary Harry H. Plumb.

TERMINAL NOTES

The Continental Grain Company of Chicago, Ill., recently increased its capital stock from \$300,000 to \$500,000.

It is announced that the North Kansas City plant of the Corn Products Refining Company, may resume operations in December.

The Corn Products Refining Company of Chicago and New York, reports for the nine months ending with September 30 a net income of \$7,959,910 after

interest depreciation, Federal taxes, etc., compared with \$8,137,251 for the same period of the year preceding.

J. H. Hoheldafer of the Tenney Grain Company of Duluth, Minn., was recently elected to membership in the Duluth Board of Trade.

The Rosenbaum Grain Corporation of Chicago, Ill., declared the regular quarterly dividend of 2 per cent on its preferred stock in November.

Lowell Hoit & Co., grain commission merchants of Chicago, Ill., have opened a branch office at Milwaukee, Wis. It is in charge of E. H. Heimke.

Fred Wickenhiser of John Wickenhiser & Co., of Toledo, Ohio, recently returned from a two months' tour of France, Germany and other European countries.

Sterling H. Nelson, grain broker of Salt Lake City, Utah, was recently appointed a member of the agricultural committee of the Chamber of Commerce.

J. A. Pease, manager of the Portland, Ore., office of the Bunge Western Grain Corporation, has resigned and been succeeded by A. G. Tuohy and W. A. Randall.

J. W. Badenoch of the J. J. Badenoch Company, grain commission merchants of Chicago, Ill., recently applied for membership in the St. Louis Merchants Exchange.

Joseph White, formerly engaged in the cash grain business at Omaha, Neb., and Kansas City, Mo., is representing the Butler-Welsh Grain Company of Omaha, in Nebraska and Kansas.

Chester L. Weeks, recently with the Hunter-Robinson Milling & Grain Company of St. Louis, Mo., has organized the Weeks Commission Company and will specialize in milling wheat at St. Louis.

Blake Dobbs Company, Inc., grain merchants on the Produce Exchange, New York, N. Y., recently filed an involuntary petition in bankruptcy. Liabilities are given as \$1,500,000 and the assets at \$25,000.

The newly established office on the St. Louis market, of the J. J. Badenoch Company of Chicago, Ill., is under the management of George Harsh, former manager of the St. Louis office of J. S. Bache & Co., of Chicago.

The Kasota cleaning and mixing elevator, for some time idle, was recently purchased by J. R. Stewart of the Banner Grain Company, Minneapolis, Minn. The purchase was made from the defunct Gee-Lewis Company, Minneapolis.

The membership of the Kansas City Board of Trade, Kansas City, Mo., recently defeated a proposed amendment to the rules of the Board modifying inspections, weighing and the issuing of warehouse receipts to elevators.

George D. Haynes was recently elected to membership in the Kansas City Board of Trade on the transfer of Marion B. Sharp. It is Mr. Haynes' plan to enter the grain brokerage business in the near future with Ralph Orthwein.

William Friedman and Amos Sproul have established a brokerage business in grain and feeds at New York, N. Y., with offices at 23 Beaver Street. They have been for a number of years past connected with the Quaker Oats Company.

The J. J. Badenoch Company of Chicago, Ill., has rechristened its lately acquired grain elevator at Rockwell Street, Chicago, the "Pennsylvania" due to the fact that it is located on the Pennsylvania Railroad. The elevator has capacity of 600,000 bushels.

Bergstrom, Stoeve & Co., Inc., is a new grain and flour firm organized in New York City, with offices at 233 Broadway in which the Deutsche Futtermittel-Gesellschaft of Hamburg, Germany, is interested. Bernard Rickenback is the firm's representative in the New York Produce Exchange.

H. C. Gamage of Moore-Seaver Grain Company, Kansas City, Mo., who recently asked to be relieved as chairman of Arbitration Committee No. 5 of the Grain Dealers National Association has been

succeeded by Harry J. Smith of the Mid-Continent Grain Company. Mr. Gamage has served as chairman of the committee for several years. During that time it has handled most of the cases originating in the Southwest.

The Saskatchewan Grain Co-operative Company of Regina, Sask., which will build a 1,100,000-bushel grain elevator on the lake front at Buffalo, N. Y., has opened an office in the Hurst Building at Buffalo. The plans of the elevator are completed and work will be commenced at once on the new structure for which they have a 12-acre site.

The Manning Grain Company has been formed by Charles H. Manning to engage in the grain business at Kansas City, Mo., with offices in 417 Board of Trade Building. Mr. Manning was formerly secretary of the Parker Corn Company which was liquidated after the death of J. F. Parker.

The Polson Grain Company has opened an office in the Grain Exchange Building, Oklahoma City, Okla., with C. A. Polson as general manager. Mr. Polson formerly represented Bruce Bros. of Kansas City, in Kansas and northern Oklahoma and more recently the Winters Grain Company of Oklahoma City in Oklahoma and Texas.

The Home Grain Company has been formed at Hutchinson, Kan., to conduct a general grain business with offices in the Rorabaugh Wiley Building. The members of the new firm are J. M. McNeill, formerly manager of the Armour Grain Company of Hutchinson, Kan., and C. G. Smith, formerly secretary of the Pierson-Lathrop Grain Company of Kansas City, Mo.

What was said to be the largest quantity of grain ever loaded on a boat at the port of Galveston, Texas, was shipped by the Grain Marketing Company of Chicago, to Rotterdam, Holland, on October 16. It comprised 443,000 bushels of wheat bought from the farmers of Kansas and Oklahoma to apply against sales to consumers in Rotterdam.

W. H. Chambers, for many years engaged in the cash grain business at Omaha, Neb., but who left that market on account of his health in 1918, to engage in farming in Texas, has returned to Omaha and is now associated with the United Grain Company. Mr. Chambers was one of the early secretaries of the Grain Dealers National Association.

Joseph Leiter, who made an attempt to corner the wheat market in 1898 at Chicago and who has not been a member of the Board since May 8, 1906, applied for membership early in November. He was expelled from the Board for non-payment of brokerage debts incurred in the "corner", but he is said to have met completely all of the claims standing against him, which were placed at from \$3,000,000 to \$7,000,000. If the settlements are satisfactory to the directorate of the Board of Trade his admission will take place in the usual routine manner.

Dr. J. W. T. Duvel in charge of the Chicago office of Grain Futures Administration issued a table on October 30 showing the reduction in percentage of moisture and the corresponding loss in weight which occurs in drying corn with excessive moisture content. The reduction matter on Nos. 2 and 3 corn is covered in the tables and copies may be obtained by writing Dr. Duvel at 717 Postal Telegraph Building, Chicago. As there will be, without doubt, much soft corn this season, the tables will prove of much value to the grain trade generally.

It is announced that the Grain Marketing Company of Chicago, Ill., will establish a branch at Milwaukee and assume the operation of a large new grain elevator to be built along the Milwaukee Railroad track. It is expected that the elevator will be built on the site of one of the houses destroyed by fire within the last four years, the foundation of which will be used for the new structure. A. R. Taylor, formerly of Taylor & Bournique Grain Company and recently manager of the Cargill Grain Company, will be connected with the Grain Marketing Company and will be located at the company's Milwaukee office.

S. HOWES CO., INC., ACQUIRES
LARGE PLANT

A transaction of special interest to the milling and grain trades was consummated October 13, when it was announced that the S. Howes Co. Inc., of Silver Creek, N. Y., manufacturers of the celebrated, and one might say, world-wide-known Eureka line of grain cleaning machinery and other milling equipment, had purchased the business of the Invincible Grain Cleaner Company of the same city. The sale was the most important local event in Silver Creek in recent years and, in fact, was of national significance, as it included the plant and good will, the capital stock as a whole, and all the real and personal property of the Invincible corporation. The officers of the S. Howes Co., Inc., who consummated the deal, were A. C. Barbeau, president; M. L. Barbeau, treasurer; and W. K. Miller, secretary.

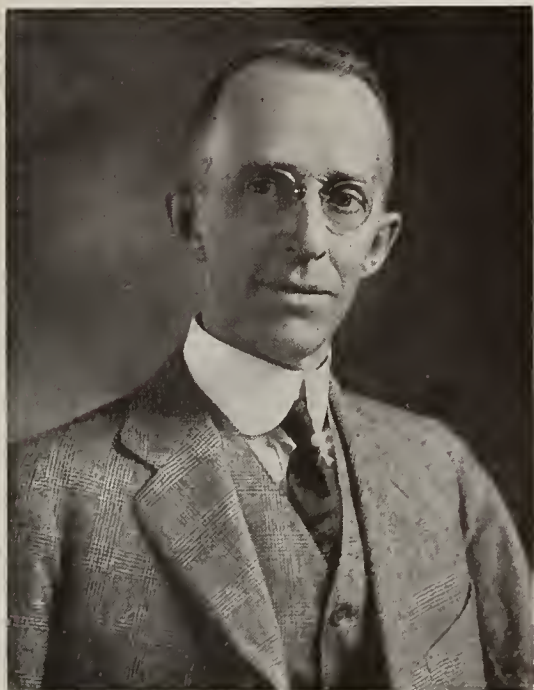
Among the important events in the history of

Kingdom but in France, Italy, Denmark, Austria, Russia, Turkey, Germany, the Orient, Africa, Australia, China, Japan, and, in fact, every country where grain is grown for market. In 1892 Mr. Howes died and three years later the business, which was now owned by his daughters, was incorporated as the S. Howes Co., and the stock apportioned among them. In June, 1895, Mr. Barbeau opened negotiations with the stockholders for the purchase of the property and in November of the same year returned to this country and became the sole owner of the Eureka works and business. Such was the origin of the firm that has just taken over the Invincible Grain Cleaner Company.

It may be stated here that during the period of years until its acquisition by Mr. Barbeau the business was known as Howes, Babcock & Co.; Howes, Babcock & Ewell; Howes & Ewell, and finally S. Howes. The S. Howes Co., Inc., is a successor of S. Howes. The business was incorporated in 1904 for \$150,000 and the capital stock was in-

His original treatises and the many catalogs compiled by him are a pleasure to read. Mr. Barbeau has the unusual ability, the happy knack, of conveying to the prospective buyer his own technical knowledge in a most lucid and convincing manner.

W. K. Miller, secretary, born and brought up in Silver Creek, has had a wide experience both in the construction and sales departments of local industries. His aggressive, clean business methods stand him in good stead in the capacity of director of sales. As a grain and seed expert he has no superior and when it comes to canning factory equipment and other special machinery, there are few who have such a profound knowledge of both processes and construction. The officials just referred to have each been engaged in the production of milling and kindred machinery for a period of about 35 years. It is rare that any industrial establishment can boast of an aggregate business experience of a hundred years among its three executives. George Settzo, the new treasurer, has



W. K. MILLER, SECRETARY



A. C. BARBEAU, PRESIDENT



M. L. BARBEAU, TREASURER

the S. Howes Co., Inc. was the entrance into the business of Louis E. Barbeau, the father of the two principal present owners of the Eureka works. Mr. Barbeau's connection with the house of which Simeon Howes was the founder, in 1856, began in 1868, when, a total stranger, he secured the right to sell Eureka machines in Canada on commission. The next year he was requested to visit the home office and was made a full-fledged salesman on salary, his territory being increased by the addition of the New England States. He was very successful in this field, making his own collections and the necessary settlements. In this and other capacities, both at home and on the road, Mr. Barbeau gave such satisfaction to his employers that in 1880 he was chosen by Mr. Howes from the other 10 or 12 members of the staff, although the youngest of them, to go to London to establish a trade in Europe, with a London office.

Mr. Barbeau's career abroad was equally successful as it had been at home and he spread the fame of Eureka machines not only in the United

creased on November 15, 1917, to \$250,000. At the time of making the purchase of the Invincible Grain Cleaner Company, the S. Howes Co., Inc., had a physical valuation of some \$500,000 and employed upwards of 165 skilled workmen in the plant, as well as some 35 in other branches, co-ordinating to produce high grade quality machines.

A. C. Barbeau is president of S. Howes Co., Inc. The success of that institution is, in a great measure, due to Mr. Barbeau's executive and financial ability. Its business has been built up to its present proportions and its product distributed wherever civilization exists largely by reason of his untiring energy, keen foresight and indomitable will. "A. C." is a familiar figure at conventions and is personally known to thousands of millers.

M. L. Barbeau, treasurer, is a mechanical engineer, and upon his shoulders have rested the responsibilities attached to that of manufacturing executive. As a feed milling expert his reputation is national. Of recent years he has devoted much of his time to the Howes Publicity Department.

long been associated with the parent concern as chief accountant. His ability in matters financial was some time ago rewarded by his appointment as assistant treasurer of the Howes Company. Mr. Holmes, elected a director of the Invincible Grain Cleaner Company, began his career by taking a practical course in the Eureka works to familiarize himself with manufacturing practices, after completing which he entered the general offices. Besides being in charge of research and experimental work, he is assistant in the publicity department.

With the acquisition of the Invincible Grain Cleaner Company, the S. Howes Co. now owns, for manufacturing purposes, seven acres of land in the heart of Silver Creek. The illustrations accompanying this article show the extent of the works together with some interior views in the shops. The principal building is the new machine shop, 75x75 feet, which adjoins the old machine shop, 165x75 feet. There is also a new foundry building, which adjoins the plant on the east. It is 100x100 feet, of brick and steel construction, in



GENERAL VIEW OF INVINCIBLE WORKS

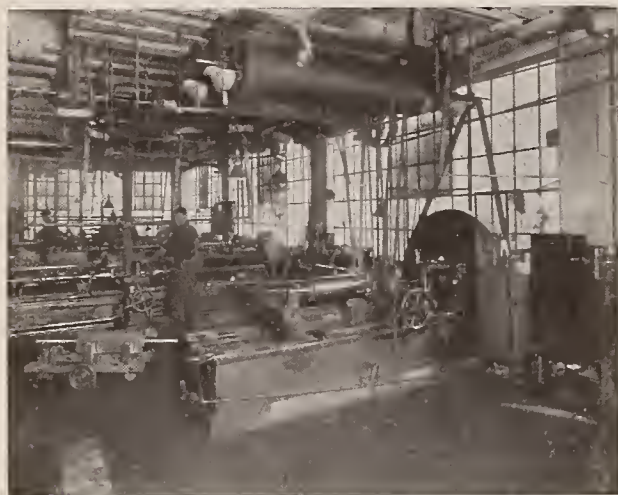


GENERAL VIEW OF S. HOWES PLANT

which the company makes all its own castings and which can handle 16 molders daily.

It has ever been the aim of Mr. Barbeau to secure the utmost facility and economy in the operation of the shops. Under the plans that have been wrought out, as well as in the conduct of the work, everything is so arranged and systematized that one part dovetails into another, so that the process of manufacture goes along smoothly from the time the raw materials are carried into the shop until the completed machines have reached the packing room to be prepared there for shipment.

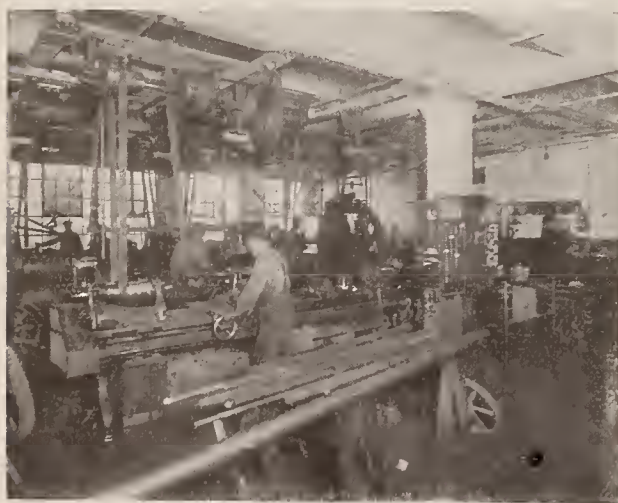
The lumber used in the building of Eureka machines is carefully selected and seasoned; in fact, it must become bone dry before it enters into the plant for production. On January 1, 1924, there was a total of 1,073,279 feet of lumber in the



A VIEW IN THE ROLL GRINDING DEPARTMENT

S. Howes Company yards and there are now about 500,000 feet in that of the Invincible company. For the greater part, maple and hardwood are used in the construction of machines and, as hard maple is now very scarce, the large number of piles of hard maple squares shown in the yard are like money in the bank. Other lumber used and appearing in the lumber yard is poplar, maple plank, cherry and ash.

The plant generates its own electricity from a high speed Skinner engine of 175 horsepower and very many of the special tools are operated by



A VIEW IN THE MACHINE SHOP

compressed air. It has been the company's policy from the beginning not to do anything by hand that could possibly rightly be handled by machinery. The plant has been built up to a standard whereby precision and accuracy linked with skilled workmanship have assured a quality production, and quality is considered by Mr. Barbeau as one of the most important factors in the company's success and growth. The company was one of the first grain cleaning firms to equip its machines with ball bearings.

Great pains have been taken by the installation of safety guards throughout the entire plant to reduce to the lowest degree the possible hazard against accidents and the Eureka works were marked 100 per cent by the New York State Government and the Board of Insurance Underwriters, for safety, sanitation, cleanliness and order. The power plant includes an Allis-Chalmers Corliss en-

gine of 150 horsepower and a battery of two 150 horsepower Union Iron Works boilers.

Special mention must be made of the well equipped roll corrugating plant which is located over the wood working shop on the third floor of the main plant. In this department are located eight corrugators and four grinders which can handle 18 rolls per day. They furnish the Dawson, Stevens or any style of cut, but their principal style of cut is the "Reilly."

President A. C. Barbeau has announced it is the intention to continue under its existing corporate name the operation of the Invincible Grain Cleaner plant bearing the well known Invincible trademark, and packers and dust collectors will be built as before and probably in increased volume. This sets aside rumors which have been rife to the effect that all work would be concentrated in the Eureka works and the other shop shut down. According to their present plans, the new proprietors will also build a very extensive and up-to-date line of machinery for canning factories in the plant just acquired and operations to that end will soon be under way.

The Invincible Grain Cleaner Company was organized on February 13, 1896, as the Howes Grain Cleaner Company. On January 16, 1897, the name was changed to the Invincible Grain Cleaner Company and it has been operating under that title ever since. With the exception of Elgin Keith and C. A. Lanphere, the original incorporators, directors and officers have passed on. It is chiefly due to Mr. Keith's ability as a manufacturing executive and his rare genius as a mechanic that the Invincible Grain Cleaner Company attained the enviable position it has occupied. An indefatigable worker from early youth and possessed of a genial nature, Mr. Keith inspired with the spirit of optimism all those with whom he came in contact. Small wonder then that Mr. Keith built up an organization imbued with loyal and earnest endeavor. Mr. Keith might rightly be termed a self-made man. He had to hew his own way in the world. With the best wishes of his friends, who are legion, he now retires to enjoy the fruits of his labor.

Although Mr. Keith, the retiring president, is handing over the reins to younger men, that does not necessarily mean he will cease all business activities. His successors announce that Mr. Keith's technical experiences will still be available in an advisory capacity to his many staunch friends in the milling and canning industries.

The newly elected officers of the Invincible Grain Cleaner Company are: A. C. Barbeau, president; M. L. Barbeau, vice president; W. K. Miller, secretary, and G. C. Settzo, treasurer. These gentlemen and C. C. Holmes constitute the Board of Directors.

FALL PASTURING OF WHEAT

"Fall pasturing seldom benefits wheat; it usually causes a reduction in yield, but there are times when the benefits will more than offset the damages," says H. M. Bainer, director of the Southwestern Wheat Improvement Association. "Under ordinary conditions," he says, "the decrease in yield as a result of pasturing will often amount to as much as four bushels per acre. For the farmer who has plenty of feed there is little to induce him to pasture his wheat, and he would be ahead by not doing so, unless it shows excessive growth. On the other hand, the farmer who has a good growth of wheat and is short of feed, especially if he has dairy cows, can often make a profit from pasturing his wheat, providing he does it judiciously.

"At present there are thousands of fields of wheat that are showing entirely too much growth. If weather conditions remain favorable, some of this wheat is likely to be damaged by jointing this fall. Under these conditions, pasturing would consume the extra growth and retard jointing, which would be of great benefit to the crop.

"Many cattlemen and wheat growers in the drier sections of the Southwest consider wheat pasturing secured in the fall as just that much clear gain. This, of course, is not true unless the wheat

should happen to prove a failure the following summer. A reasonable amount of pasturing may not do much harm, but the danger lies in overdoing it—turning stock onto it before the plants get a sufficient start, or grazing too closely, thereby leaving the crop without winter protection and the ground in a condition that it is likely to blow. Grazing when the ground is wet will cause more injury than the value of the pasturage. Too much pasturing is sure to give the crop a setback, causing winter killing, late maturity, more damage from hot and dry weather, and lower yields."

THE DEATH OF SECRETARY OF AGRICULTURE WALLACE

Secretary of Agriculture Henry C. Wallace died at four o'clock, the afternoon of October 25 at the Naval Hospital in Washington, D. C. The immediate cause of his death was toxemia poisoning, which followed an operation performed a week before in an effort to relieve sciatica. He had been unconscious for the greater part of the day, and with him when the end came were Mrs. Wallace and their daughter, Ruth.

Secretary Wallace was an Iowa publisher of farm papers and for many years had been conspicuous in agricultural affairs. He was a Roosevelt pro-



THE LATE SECRETARY HENRY C. WALLACE

gressive and his selection by President Harding as Secretary of Agriculture was a recognition of the progressive wing of the Republican party as well as of the western agricultural interests.

Mr. Wallace was born in 1866 in Rock Island, Ill. He attended the Iowa State College of Agriculture, served for a time as professor of dairying at the Iowa State College, and finally became associated with his father in the publication of farm papers.

President Coolidge designated Charles F. Marvin, chief of the weather bureau, as acting secretary. This was due to the absence of Assistant Secretary Howard M. Gore, who under the existing law would become acting secretary automatically. The death of Secretary Wallace is the fifth break in the original Harding cabinet, and means the third change since President Coolidge assumed office. His death came as a surprise, and will make an early appointment necessary, in the opinion of administration leaders, as agricultural questions occupy an important and pressing position in national affairs today.

Editor American Grain Trade:—Enclosed please find \$1 for which renew my subscription to the AMERICAN GRAIN TRADE. I sold two months ago (October 16) to the Fields-Webster Elevator Company of Sioux City, Iowa. J. K. MCGONAGLE, Washta, Iowa.



RADIO CORPORATION EARNINGS

For quarter ended September 30, net income of \$1,200,284 after depreciation was shown.

Net income of \$1,200,284 for September quarter is equal after preferred dividend to 74 cents a share on 1,155,400 common "A" shares outstanding.

Income account follows:

Gross income	\$11,183,379
Cost of sales, expenses and depreciation	9,983,095
Net income	1,200,284

EMPLOYEES OF GENERAL MOTORS BENEFIT

Shortly after the end of this year more than 8,200 employees of General Motors and its subsidiaries will receive \$1,036,000 cash and 23,500 shares of new common stock, which at current market prices is worth \$1,364,000. This total of \$2,400,000 is the participation of these employees in the savings and investment fund, class of 1919, into which these employees paid \$760,000 from their wages and have left with the corporation for five years. This distribution therefore represents better than \$3 for \$1 paid into the fund by employees.

NATIONAL BANK RESOURCES UP

The resources of American national banks are greater at present than at any period since November, 1920, according to a statement issued by Comptroller of the Currency Dawes. Returns from 8,074 reporting national banks on October 10, Comptroller Dawes said, show resources amounting to \$23,323,061,000. This is an increase of \$757,142,000 over the sums reported on June 30, 1924, and an increase since September 14, 1923, of \$1,610,185,000.

"Between the dates of the last two reports, loans and discounts were increased \$231,420,000 and the amount October 10, 1924, \$12,210,148,000 shows a gain over September 14, 1923, of \$275,592,000," the summary said.

SUGAR REFINING COMPANY TO BUY

Earl B. Babst, president of the American Sugar Refining Company, announced that the company was discussing tentatively an offer for the properties of the National Sugar Refining Company.

"For some time this company has had under consideration plans for restoring its refining position in New York harbor," said Mr. Babst. "For many years it has owned a quarter interest in the National Sugar Refining Company and is now discussing tentatively an offer for the property. The matter has not reached a point which warrants any further statement."

The American owns about a 24 per cent interest in the National at the present time. At one time it had about a 51 per cent, or a controlling interest, in that company, but following a suit brought by the Government a large part of this stock was sold to shareholders of the American.

PRICES STRONGER AND COPPER ACTIVE

Copper demand continues good on domestic account and aside ship buying has begun again on the market. European sales, however, are smaller than was typical of last week.

Price is firm at 13½ cents, delivered, with some of the larger agencies reluctant to sell at current prices, and one of the largest out of the market temporarily upon expectation of further advance in next few days.

Strong public buying of stocks in spite of considerable profit-taking seems to point to wide be-

lief in material improvement in business as result of the election, not only for the railroads but for industrials generally, copper producers are inclined to believe that this means higher price of copper. Domestic consumers appear to be of the same opinion and are not haggling as to price.

DEPRECIATION FUND OF PHONE COMPANY

In the course of the resumed hearing before Special Master Isaac R. Oeland on the application of the New York Telephone Company for authorization by the Public Service Commission of a permanent increase of 10 per cent in rates to subscribers, H. A. Pax, chief accountant of the company, testified on cross examination that the corporation has built up a depreciation fund of from \$90,000,000 to \$100,000,000. This fund, the witness said, had been built up from the rate charged for depreciation over and above money used to replace worn out and obsolete property.

PROBABLE LONG TERM U. S. BORROWING

Talk of probable long-term borrowing by the United States Government between now and the end of the year was revived with the election uncertainties out of the way. Inquiry developed that the expectation of such a loan is predicated largely upon favorable market conditions and the belief that the Treasury may desire to fund part of its floating debt. The maturities and call features of the Liberty loans make 1927 the earliest date at which funds are needed in connection with the retirement of the long-term debt.

The volume of Treasury certificates of indebtedness and notes outstanding, however, is not so great as to involve any pressing problem and many bankers are of the opinion that the Treasury will prefer to retire them gradually as balances for that purpose are available rather than to fund them.

UTILITIES MERGER CONTEMPLATED

Supplementing the merger, recently effected, of Public Service Electric Company, Public Service Gas Company and United Electric Company of New Jersey into Public Service Electric and Gas Company, application was made before the State Board of Public Utility Commissioners for permission to amalgamate into the newly formed company seven relatively small additional companies.

The additional companies are the Burlington Electric Light and Power Company, Citizens Electric Light, Heat and Power Company, Middlesex Electric Light and Power Company, Morristown Gas Light Company, Nichols Electric Light and Power Company of Nutley, Princeton Light, Heat and Power Company and Weehawken Contracting Company.

Nearly all of the capital stock of the foregoing companies is owned by the Public Service Corporation of New Jersey.

EARNINGS OF RAILROADS

Minneapolis & St. Louis

Gross revenues for October totaled \$1,659,978, an increase of \$112,953 compared with the corresponding month last year. Since January 1 gross revenues totaled \$12,628,404, a decrease of \$1,311,284 from the corresponding period last year.

Buffalo, Rochester & Pittsburgh

Buffalo, Rochester & Pittsburgh Railroad reports for the four weeks of October a gross of \$516,953, a decrease of \$65,924 from the corresponding period last year. For the month of October the railroad reports gross revenues of \$1,516,980, a decrease of

\$289,940 from the corresponding month last year and since January 1 gross revenues totaled \$14,166,318, a decrease of \$6,777,468, compared with the corresponding period last year.

Southern Railway

For the month of October the gross revenue was \$16,606,275, a decrease of \$866,999 from the corresponding month last year. Since January 1 the company reports gross revenues of \$154,591,331, a decrease of \$10,400,084 from the corresponding period last year.

Great Northern

For the fourth week of October the gross revenue was \$4,779,553 or \$53,341 less than that for the same period a year ago. The October gross was \$14,259,076, an increase of \$100,635 but for the year to date the gross is \$10,159,396 less than that reported for the corresponding period a year ago, aggregating \$89,287,004.

MARKET OPINION

Thomson & McKinnon

We continue to entertain a favorable opinion of the market.

Paine, Webber & Co.

There is no sign of a letup in this market. The speculative craze is growing and buying is coming from all over the country. We think activity and strength will continue for a long time and spread from rails to industrials.

Dean, Onatvia & Co.

We believe the oil and copper issues are bound to show marked improvement before the great rise culminates and strongly advise their purchases.

Stein, Alstrin & Co.

We anticipate a renewal of interest in the industrial section of the list. We continue bullish on both the oil and rail stocks, and recommend their purchase on any reaction.

James E. Bennett & Co.

Oil stocks are attracting more attention and we expect them to gradually work higher. Coppers should follow the market upward as they have considerable independent merit. We continue to take a general bullish view favoring rails, oils and coppers.

FINANCIAL NOTES

Bethlehem Steel has doubled its operating rate in the last three months, according to E. G. Grace, president. The outlook for a steadily increasing demand indicates that a period of active business is immediately ahead, he added.

International Paper, it is reported, plans the erection of a large pulp and paper mill at Chelsea, Quebec, which will cost around \$3,000,000, and the taking over of all the properties of the Gattineau Company, Ltd., and paying off mortgages of another \$3,000,000.

Nash Motors, despite the general slack prevailing in the motor industry generally, established a new monthly high sales record during October, an official of the company reports. Business gave no indications of a let up during the first part of November, he said.

Standard Oil of Indiana is truly a public owned institution. There are 49,451 stockholders on the company's book, not one of whom owns more than 6 per cent of the stock. Among this number are 11,000 women. The company employs approximately 27,000 people.

Pure Oil Company's sales of petroleum products in eastern marketing territories are showing great increases over a year ago. These results are being attained through additional facilities for the handling of such business. Besides its Marcus Hook, Pa., refinery, the company's eastern requirements are partly supplied from its new Smith's Bluff refinery, located on the Gulf Coast of Texas and shipping by the company's tankers to the eastern seaboard. The company has added to its marketing organization at other points in its eastern distributing organization, strengthening company's possessions in the territory and adding to the volume of its sales. Officials of the company believe that its current fiscal year will be largest in its history in the volume of its eastern sales.

NEWS LETTERS

MILWAUKEE

C. O. SKINROOD - CORRESPONDENT

MILWAUKEE'S grain trade is back to its old stride with thousands of cars pouring into this market each month. The car load receipts for October have been surpassed only once this year—in September and the high record set up for October was with one or two exceptions, the best October showing of the Milwaukee market at any time in its history. Last year in the month of October, the wheat supply at the local market was almost negligible with only about 267,000 bushels. This year the total soared to 1,657,000 bushels. Even the supply of barley climbed up close to 1,840,000 bushels. Rye receipts soared to 887,000 bushels. The only black spot in the grain trade at Milwaukee for the past month was in oats with something like 3,000,000 bushels offered this year as compared with well over the 5,000,000 bushel mark for the corresponding month of last year.

Lowell Hoyt & Co., grain and seed dealers at 141 Jackson Blvd., Chicago, will be represented in Milwaukee by E. H. Heimke, one of the well known grain men of the city. Mr. Heimke will have his office at 206 Chamber of Commerce. Of the \$100,000 capital of the company, all paid in, about \$25,000 will be represented in Wisconsin.

Closed since the Eighteenth Amendment went into effect, the malting plant at Watertown, Wis., will open for business at once. The plant formerly owned by the American Malting Company was acquired by the Fleischmann Malting Company some months ago. When the Dayton, Ohio, plants of the Fleischmann company broke down, it was decided to open the Watertown plant.

An old time carnival spirit reigned at the Milwaukee Chamber of Commerce, Tuesday night, November 4, at the close of election day. More than 300 members, their families and their guests were present. Dancing and vaudeville were provided for entertainment while the returns were coming in. E. P. Patterson declares that the stunt was such a success that it will be repeated several times during the winter. Mr. Patterson was chairman of the Arrangements Committee. He was assisted by William Young and Frank Phelan.

The November rate of interest at the Milwaukee Chamber of Commerce on advances has again been fixed at 6 per cent, the same rate as has prevailed now for several months.

A. R. Taylor, a well known grain trader at Milwaukee and former president of the local Chamber of Commerce, has become connected with the Grain Marketing Company branch at Milwaukee. This is the new \$26,000,000 co-operative concern recently organized to operate in many cities. A. R. Templeton has been placed in charge of the Milwaukee branch of the company and it is expected that a large business will be developed in this city.

Milwaukee stocks of flour have been cut down sharply in the last 30 days with only 25,000 barrels on November 1 as compared with approximately 54,000 barrels a month ago.

Raymond H. Weins has been named secretary-treasurer of the Great Lakes Harbor Association to succeed Herman Bleyer, who died not long ago. Mr. Weins has for some years been connected with the Edward E. Gillen Company, builders of docks and break waters. The Great Lakes Harbors conference will be held in the city of Cleveland about the middle of January. Mr. Weins is now a resident of Milwaukee and has been for some time.

A grain elevator with a capacity of more than 1,000,000 bushels will be erected in Milwaukee it is expected within the next year. Plans call for the construction of such a building along the tracks of the Chicago, Milwaukee & St. Paul Railroad on one of the sites of the several grain elevators which have been destroyed by fire in the last few years. The exact site of the new elevator will be announced soon, ac-

cording to officials of the Chicago, Milwaukee & St. Paul road located here.

Figures were recently compiled to show that the Chicago & Northwestern road has become the leading grain hauler to Milwaukee. The Chicago, Milwaukee & St. Paul, recognizing its supreme need for more grain space, will take steps to meet this situation, according to the company's officials here. The new structure will have a capacity for handling 30 to 40 carloads per day. As soon as the site is announced, it is expected that construction will begin at once.

The Green Bay & Western Railway Company is building a concrete storage elevator at Green Bay, Wis., with a capacity of 500,000 bushels of grain. The ground dimensions of the structure will be 40 by 143 feet and it will be 103 feet high. The storage space will be about three times the capacity of the present elevator.

George W. Chandler, one of the old time members of the Milwaukee Chamber of Commerce, is dead. Mr. Chandler joined the Chamber in 1866, just 58 years ago. Charles Ray joined in the same year. Calvin E. Lewis joined the organization in 1862. Mr. Chandler was therefore the second or third oldest member of the grain board. The Milwaukee Chamber still has some nine members who have been connected with the board 50 or more years.

Three boats which belonged to the Hill Steamboat lines were sold to the Crosby's at Milwaukee for a consideration of only \$39,000. The boats were sold at an auction in the office of Richard H. White, United States marshal. The purchase price was much less than the total mortgage and liens on the boats, which aggregated \$131,000. The purchaser paid the \$39,000 to Mr. White and now a legal battle will be staged between the mortgage holders and the lien holders as to whether the mortgage or the liens take precedence.

The Crosby Line will operate the Hill boats purchased. The Crosby company is a new corporation formed to take over virtually all the business of the Hill lines. F. G. Crosby is the president and general manager of the new corporation. L. M. Biron is the vice-president and J. A. Overton is secretary-treasurer. The directors are the officers and Francis Bloodgood and Jackson B. Kemper. In Milwaukee, the company will use the docks of the Crosby company.

Milwaukee mills are considerably more active than last year. For the past week the milling output has been 6,000 barrels of wheat flour as compared with 6,200 barrels for the previous week and 4,500 barrels for the corresponding week of last year.

The Milwaukee Chamber of Commerce was closed on Armistice day although this day is not a legal holiday in the State of Wisconsin.

The first car of new corn appeared in Milwaukee on Saturday, November 8. It came from southern Minnesota and was graded as sample grade White with 26.4 per cent of moisture. The weight was only 44 pounds to the bushel. A heavy moisture content in corn and much off quality goods are expected this fall and winter by the Milwaukee grain trade.

The first week of November throws some light on how the grain receipts will roll in for the last two months of the year. At Milwaukee the receipts for that week were 912 carloads, compared with 1,158 carloads for the week before, 701 carloads for the corresponding week of last year and 573 carloads for the corresponding week of last year. These figures indicate that the grain supply will decline to some extent from the previous marketing, but receipts will still be far above those of the corresponding week one and two years ago.

Milwaukee will take part in the national rivers and harbors congress in Washington on December 10 and 11. At this time the St. Lawrence deep waterway will be one of the principal subjects, according to William George Bruce, harbor expert of Milwaukee, and chairman of the Milwaukee Harbor Commission. Mr. Bruce says that he and Mayor Daniel Hoan and perhaps a special delegate from the Milwaukee Harbor Commission will probably make the trip to Washington.

W. J. Armstrong, who was one of the leading hay dealers of Milwaukee for many years under the firm name of W. J. Armstrong Company, has joined the La Budde Feed & Grain Company as a traveling solicitor.

KANSAS CITY

B. S. BROWN - CORRESPONDENT

IF ALL the money that the outside world believed was available from wheat in the Kansas City territory, were added up, it would amount to several billion dollars. The records of the grain trade here show that a good quantity was marketed, and at good prices, making a sizeable total—but the net result is not very far from normal. The reports of the big Kansas crop had caused a flood of salesmen, house to house canvassers, and mail order literature, to fall down on that state—and farmers were besieged by appeals to buy—and to sell their wheat in order to buy. But the farmers did not spend their money foolishly; they paid debts, chiefly. And they did not rush all their wheat to market. In some districts, it is said that 80 per cent of the wheat produced this year had been marketed by the first of November, very many farmers reporting "last load" at elevators.

Conditions have been very fine for fall sown wheat, with weather perhaps a little too dry in most places. Pasturing is being done; but with caution. Corn is now holding the center of interest, with conditions especially good in this district for proper maturing. First samples of new corn are said to be especially low in moisture content. And the merchandising public is now turning its attention to the corn money, as the source of their winter's wealth—the supposedly big production of both Kansas and Missouri promising a harvest for merchants after the farmers get theirs. But Kansas corn is said to be below expectations in some sections. Guesses are now being made as to what Kansas will do with its crop. It is now reported that fall feeding will not be particularly extensive, and that much of the crop will be marketed as grain rather than in live stock.

Board of Trade operators who have laughed at the simplicity of the public that believes stories of "manipulation for political purposes," are now pointing to the rising prices of grains that showed after the election. Prices sagged before election; but turned upward quite promptly when the affair was over—whether the result had any effect on the minds of sellers and buyers, or the mere fact of an anxiety out of the way. The grain men therefore are saying that the strong prices in October, and until the immediate pendency of the election, showed real strength, and not a fictitious pressure.

A party of 30 grain men had the pleasure of viewing the ideally accomplished ambition of Thad L. Hoffman, president of the Kansas City Flour Mills Company, on election day. This was a country home, which has been—and will largely remain—a golf links. Mr. Hoffman has bought the old Shawnee Golf Club, a tract of 90 acres which has been used for golf for about 15 years. It has been considered the sportiest course in the West; and anybody who has played over it, including this writer, will always remember and talk about certain holes. The club which owned and operated it relinquished its possession after the burning of the club house several years ago. Since then it has been operated by Les Lovelace, a professional, as a "dollar course," with good success. Mr. Hoffman will use this property primarily as his own country home, retaining his town residence in Kansas City. He will let some of his friends in on it, by arrangements not yet definitely announced, they to build country homes nearby, and forming a community of interest in the use of the facilities. Mr. Hoffman has three daughters, for whom this estate will form a playground. The tract is 15 miles from Kansas City, in Kansas. Mr. Hoffman is himself a member of the Kansas City Board of Trade.

Preparations are being made for moving the Board of Trade, and the offices of the tenants, into the new structure at Tenth and Wyandotte Streets. It is now expected that the move will be made on January 1; and plans are being consummated for the coincident removal of the entire grain business as now assembled in the present Board of Trade building, by one firm. Elaborate details will be worked out for this project, with locations of furniture designated in new offices; and it said that the whole trade can be moved in one day, and be ready for business the next. All the ten-

ants in the grain business, in the present building, will have quarters in the new; and numerous grain and allied firms, now in other buildings, will have rooms in the new also. Many financial firms are also leasing offices. The new structure will therefore be the realization of an ideal in the assembly of business in one building, grouped around the grain trade. The trading hall in the new building will be on the thirteenth floor, with high ceilings, sound-absorbing walls, and equipment, of course, of the most modern type. Special attention is being given to the decorations, so that the members will be proud of this trading hall, and a high standard of business relations will be stimulated, through the atmosphere.

One proposal that was adopted at the election, is especially welcome to the grain trade—the proposal to about double motor car taxes, and imposing a two-cent gasoline tax, for road purposes. The funds so raised will be used chiefly in maintenance of roads, and in paying expenses of the road program under the Commission, saving the \$60,000,000 bond issue for actual construction of the state system. Even this year farmers found roads in Missouri immeasurably better for hauling grain, than last, through the completion of some road, and improvement of others.

A copper plate of a photograph of George S. Carkener, of the Goffe & Carkener Grain Company, is one of several mementoes placed in the corner stone of the Kansas City Liberty Memorial. The memorial, now in process of erection opposite the Union Station, was dedicated November 9, with elaborate ceremonies. The corner stone, with its selected items of contents, will be sealed, to be opened 100 years hence. The photographs of the members of the Liberty Memorial Association that carried through this great project, 17 men and women, are among the most important of these items, and Mr. Carkener is a member of that body. Another of the pictures is of a former grain man, now looked upon rather as a banker and financier—W. T. Kemper.

R. T. Morrison of the Morrison Grain Company, returned recently from a trip to Europe. He makes encouraging reports of the condition of the people in Belgium and Germany, having been particularly struck with the apparent prosperity of many Germans met who were traveling for pleasure or health.

The top price in Kansas City for cash wheat for the season, was struck October 17, with a car from Buffalo, Okla., grading No. 3 Hard, testing 57 pounds, and 15.96 protein, and selling for \$1.57.

A milling change of wide interest to the grain trade, was the resignation of Charles L. Roos as general manager of the Hunter Milling Company, Wellington, Kan. George T. Hunter, president of the company, whom ill health caused to retire from active work several years ago, is much recovered in strength, and is again taking active charge. C. W. Hunter, formerly secretary of the company, and now operating the Attica Mills with Harry Hunter, also will give some time to the Hunter Milling Company interests. Mr. Roos was prominent for many years in milling circles, having been president of the Millers National Federation. The ill health of his wife is a factor in his resignation.

Eugene J. Gissler, secretary of the Moffit-Napier Grain Company of St. Louis, has been elected to membership on the Kansas City Board of Trade, on transfer from N. L. Moffit, who died recently. Mr. Gissler will represent the St. Louis firm on this market.

C. C. Orthwein, known to friends as "Chick," widely known in the grain trade, died in Kansas City, October 31, while on a visit, from his home in Los Angeles. Mrs. Orthwein had arrived only a few days before his death, which followed a heart attack suffered while at the home of friends here. Mr. Orthwein was 55 years old. He had come originally to Kansas City from his early home in St. Louis, and was in business in this city for 22 years. He was an organizer of the Orthwein-Matchette Company, but had withdrawn from that company before its failure, and is survived by three brothers, Max Orthwein, St. Louis; John Orthwein, who lives in Switzerland, and Ralph Orthwein, who is a member of the Kansas City Board of Trade. He is also survived by three sisters, Mrs. Frank Everts, Mrs. Arthur Seuerbach of St. Louis, and Mrs. Fannie W. Smith of Los Angeles.

George D. Haynes, of the Kansas Feeding Company, has purchased the Board of Trade membership of Marion B. Sharp, and has been elected to the Board. The price, including transfer fee, was \$8,500. Mr. Haynes will be associated in the grain brokerage business with Ralph Orthwein. Mr. Sharp, formerly with the Moore-Seaver Grain Company, is now connected with the advertising department of a local newspaper.

Two workmen were killed October 25, when the scaffold on which they were working, on the new Board of Trade Building, fell at the tenth story. The coroner's jury exonerated the contractor from blame, it having been shown that the scaffold rope, which

broke, was only one month old. It was believed, but not found, that acid used in materials used in cleaning the surface had touched the rope and weakened it.

John W. Cain, sales manager of the Midland Flour Milling Company, has been elected vice-president of that company. Mr. Cain is now in Europe, on a six weeks' trip.

The members of the Kansas City Board of Trade back up their "talk" about helping to keep down crime, with practical showings. Bandits have been getting away with a good deal, in Kansas City the past summer, with holdups of banks, stores, and persons, a downtown holdup of a jewelry store having resulted in several injuries and the death of a taxicab driver forced to carry a bandit around on his expeditions. A purse of \$100 was recently raised among Board members, as a reward to a policeman who captured three bandits in the act of holding up a drug store.

Charles H. Manning, formerly with the Parker Corn Company, which was liquidated early this fall following the death of J. F. Parker, has organized the Manning Grain Company. He is its president. The new company began operations November 1. It will do a general consignment business, but will make corn a specialty.

C. K. Davis of the Hodgson-Davis Grain Company, after an extended absence because of a nervous breakdown, is back at his office, practically recovered.

BUFFALO

ELMER M. HILL CORRESPONDENT

CHARGES are made by Great Lakes grain shippers that the harbor at Oswego, N. Y., is not deep enough to accommodate the large lake grain carriers wishing to use the new state owned elevator nearing completion at that port. The problem of deepening the Oswego harbor already is under consideration and the state authorities propose to start work in the early spring to deepen the harbor so that the new state-owned grain elevator will be of service to western shippers. Oswego is reached via the Welland Ship Canal and Lake Ontario. Federal aid will be asked by the New York state authorities, it is said.

J. W. Enright represented the grain, hay and seed industry at the conference of the Great Lakes Shippers' Regional Advisory Board, which met in Buffalo early this month. Problems facing receivers and shippers of freight were discussed at the meeting with special attention to car loadings, volume of movement, condition of motive power and condition of freight equipment. Terminal conditions also came in for some discussion so that there will be no danger of a congestion at the terminal elevators along the waterfront this season. Grain shippers urged upon the railroads the necessity for supplying sufficient cars daily to handle the grain movement from Buffalo to the Atlantic Seaboard.

Charles F. Strasmer, for many years superintendent of the Connecting Terminal Grain Elevator on the Blackwell Canal, has been retired on a pension by the Pennsylvania Railroad Company, owner of the elevator. Although associated with a separate corporation, Mr. Strasmer is retired by the Pennsylvania Railroad with all the privileges of a Pennsylvania Railroad employe. Failing health was the cause of his retirement. Mr. Strasmer has been in the employ of the company 46 years continuously. He is one of the best known elevator superintendents at Buffalo. He began his career with the Pennsylvania as a messenger boy. Later he was made paymaster and superintendent of repairs. In May 1880 he was promoted to be boss stevedore and tallyman and in April, 1903, he was made elevator superintendent and agent for the Anchor Line, the company's fleet of lake steamers. The first elevator of the Pennsylvania was an old wooden structure. The modern concrete elevator now known as the Connecting Terminal has a capacity of 1,180,000 bushels.

A new portable marine tower has been placed in operation at the Frontier Elevator in the Buffalo Harbor. It has an unloading capacity from boats of 16,000 bushels an hour. The new leg and the old stationary marine tower have a combined capacity speed of 30,000 bushels an hour. On the dip both towers can take out about 45,000 bushels an hour. The steamer *Hoover & Mason* was the first ship to be unloaded with the two legs and in the first hour 42,000 bushels were unloaded, which is considered fast work as the *Hoover & Mason* is a slow boat for unloading as it is a hopper bottom ship. The Washburn Crosby Company controls the Frontier Elevator. Officials of the mill say the Frontier is as fast as any two legged elevator on the lakes.

Another new steamer has been added to the grain carrying fleet on the Great Lakes. The steamer *E. J.*

Berwind, built at Detroit for the Franklin Steamship Company of Cleveland, has been placed in the grain trade between Lake Superior ports and Buffalo. On her maiden trip last month the steamer *Berwind* carried a cargo of 435,000 bushels of wheat from Fort William to Buffalo. The cargo was unloaded at the Superior Elevator in record time. Only 14 hours and five minutes were necessary to unload the cargo. This was at the rate of 31,000 bushels per hour, Edward Hull, superintendent at the Superior Elevator, declared. Among the grain and elevator men at the Superior Elevator to see the new ship were Joseph B. Rodgers of Brown & Co., Charles H. Williamson of the Williamson Forwarding Company; Messrs. Terry, Carsons and Brown of the New York grain market. The *Berwind* is 592 feet long with a 62-foot beam and 33 feet deep.

The attempt of Cleveland fleet owners to recover from the grain shippers of Buffalo and other cities about \$360,000 as damages for the tie-up of their ships in the Buffalo Harbor during the fall of 1922, will come before the Supreme Court in Buffalo this month. The case will be watched with great interest by shippers along the Great Lakes and grain shippers in Europe. Should the vessel owners be successful in the test cases in establishing demurrage claims, more than \$800,000 will be asked by boat owners from shippers as demurrage at the rate of \$1,000 a day. The Cleveland Cliffs Iron Company, owner of a fleet of 15 boats and controlling eight others, is the plaintiff in the test case and eight shippers are named as defendants including four Buffalo firms. Defendants include Otto Kesuch & Co., of New York, grain exporters; Western Elevating Association of Buffalo, Buffalo Forwarding Company; Townsend Ward Company, of Buffalo; John Cunningham, Buffalo Elevator representative; Ralston Purina Company; Buffalo Milling Company; Armour Grain Company; William H. Muller Company, New York exporters, and Sanday & Co., New York grain exporters. Bills of lading on grain shipments do not usually include demurrage clauses, the boat owners being protected by a provision that the shipper must use "due diligence" in receiving that shipment. When grain shipments are heavy, however, and there is a scarcity of bottoms to carry the cargoes, the owners have put demurrage clauses into the bills of lading. Demurrage penalties have been placed at \$1,000 a day after three days. The strike of the railway shop workers in 1922 caused a shortage of motive power. The coal strike brought Government orders for preference to coal shippers and the result was a most serious freight car shortage ever known at this port. The elevators were unable to unload grain as fast as it arrived and grain carriers were delayed in port for weeks.

Existing rates on grain and grain products charged by the New York Central and Delaware & Hudson Railroads between Buffalo, Ogdensburg and points on the Delaware & Hudson south of Rouses Point have been characterized by representatives of Ogdensburg millers and grain shippers as a barrier to competition and by representatives of the railroad as necessary and protective. The arguments were brought out at a hearing before the Public Service Commission in Albany. Millers and grain shippers told the Commission the rate for through shipments from Buffalo to Boston should be applied to the Delaware & Hudson shipments as they are now unable to compete with other millers, notably those at Plattsburgh, who receive wheat from Buffalo over the Delaware & Hudson via Binghamton. John Dorsey, secretary-treasurer and manager of the Ogdensburg Roller Mills, testifying on behalf of all Ogdensburg millers, said present rates are forcing mills in his section into idleness.

During the month of October, elevators in the Buffalo Harbor unloaded a total of 52,586,000 bushels of grain, breaking all record for a month's time. This brings the total for the season up to November 1 to 185,035,000 bushels which exceeds any previous season for the corresponding period. The operations at elevators have been favored by a good supply of cars and the heavy shipments of grain to Montreal and over the New York State Barge Canal to the Atlantic Seaboard. There has been a decrease in shipments from the Canadian Head of the Lakes while the movement to Buffalo from Duluth and Superior and Chicago has been exceptionally heavy. The largest part of the shipments has been domestic grain en route to Europe via New York. Many million bushels of flax have been handled during the season. Grain men and elevator owners believe total receipts this year will exceed the 200,000,000 mark.

The R. D. Eaton Feed & Grain Company of Norwich announces it has discontinued the retail department of its business and in the future they will confine their activities entirely to wholesale feed and grain. In view of the fact that the company was established in Norwich in 1838, or 86 years ago, the abolishment of the retail section of the firm is considered a radical step. R. D. Eaton, president of the company, has been the directing factor of the business for 44 years. The business was established by the late Jonathan Wells.

Chartering in the Great Lakes grain trade was light during the opening week of the month. Demand for

early loading tonnage has been light. Shortly before the new grain began to arrive at the lake receiving ports, fancy rates were offered for boats but this continued only for a brief period. Shippers have been offering 2½ cents for boats to load at the Head of the Lakes during the last 10 days of November for Buffalo. The rates from Lake Superior to Buffalo for storage cargoes is 4½ to 5 cents. From South Chicago to Georgian Bay for storage, 4¼ cents is being offered. The storage fleet at Buffalo is beginning to increase and up to November 10, there were 17 boats in port. A large winter storage fleet is expected this season.

NEW YORK

C. K. TRAFTON - CORRESPONDENT

JOHAN A. SIM, who has been general manager of the Hecker-Jones-Jewell Milling Company for 11 years, has been elected vice-president of the company, and also of the Hecker Cereal Company. Mr. Sim was in receipt of hearty congratulations from his many friends on 'Change and in the flour trade generally upon his well deserved promotion. This, of course, does not prevent his continuance of the office he has filled so well for so long a time.

Kenneth R. Montgomery, for several years a member of the New York Produce Exchange, and a son of Archie Montgomery, head of the grain and cottonseed oil firm of Montgomery & Jenkins, left late in October for a six months' visit to Florida. While there he will devote much time to the real estate business in which he is interested. Just before leaving he was surrounded by many of his friends on 'Change who expressed regret at his going and wished him all success during his absence.

Hans Simon, who for several years was the representative and chief manager in the country of the big French importing house of L. Dreyfus & Co., with their principal office in the New York Produce Exchange, retired from that concern on January 1 and was succeeded by F. Leval and Leopold Stern. He still retains his membership in the New York Produce Exchange. Mr. Simon left immediately for Florida where he was interested in real estate matters, but soon went on an extensive trip to Europe and North Africa. Recently he returned and received a warm welcome from his friends on 'Change and informed them that he had found the weather extremely unfavorable much of the time on the Continent.

Henry Forster, treasurer of the old grain receiving and exporting house of Milmine, Bodman & Co., Inc., left late in October for a six months' vacation in Florida. Mr. Forster has been with the firm for 45 years having started when a mere boy. During all those years he had only short vacations, and hence is taking a long one now as he feels he has earned it.

G. W. Beaven, familiarly called "Walter" by his host of friends on the New York Produce Exchange, as well as the Chicago Board of Trade, where he is manager of J. S. Bache & Co., was a visitor here this month. Although Mr. Beaven has been busy in the Chicago market for several years he still retains his membership in the local exchange. In his judgment, December wheat will hold around \$1.35 to \$1.55 until the crop in Argentina is made, the competition between Argentina and Canada will cause a drop, he believes. He said he feels bearish on corn.

Thomas J. Coulter of Coulter & Coulter, flour jobbers, was welcomed back late in October from a two months' visit to his old home in Ireland. Practically all the time he was away he found the weather decidedly bad, heavy rains falling much of the time.

Sam Mincer, the well known grain operator on the Chicago Board of Trade, spent a few days with old friends on the New York Produce Exchange while on his way to visit Europe. It was asserted that he had liquidated all his holdings of grain before leaving Chicago.

James E. Carney of the Chicago Board of Trade and the Bartlett Frazier Co., spent about a week late in October visiting friends in the local market.

Members of the grain trade on the New York Produce Exchange and other markets, were greatly pained and surprised to hear that the popular and well known house of Blake, Dobbs & Co., grain exporters had failed with liabilities of \$1,500,000 and assets of only \$25,000. It was evident that they had used up all their capital in trying to stem the tide. Because of the exceedingly large liabilities it was the general opinion that the firm owed its huge losses to having sold large quantities of wheat for export and failed to properly hedge the sales. Great sympathy was expressed because the heads of the firm, Thomas M. Blake and his son, Thomas A. Blake, had many warm friends not only in the grain trade but also in the

hay and feed lines, with which they had long been connected previous to becoming exporters. Many years ago Mr. Blake was associated with the old firm of P. Lenane & Brother, for many years prominent as distributors of grain, feed, hay, etc., in the local market.

Charles A. Robinson of the New York Produce Exchange and Chicago Board of Trade, the popular head of Robinson & Sweet, received a warm welcome back on 'Change from his many friends after a four months' visit to Europe, during which time he traveled over a large area, largely by automobile, accompanied by his wife who is known as the National Americanization Flag Lady of the Veterans of Foreign Wars, as she presented more of our flags than any other individual. Mr. Robinson stated that during his visit he found the weather generally bad, being cold with rain or snow and therefore crop conditions were decidedly unsatisfactory.

J. F. Vietor was active in the local grain market while with the export house of William H. Mueller & Co., Inc., but when this firm gave up their export department Mr. Vietor returned to Europe, where he remained about a year. He was back on 'Change late in October and received a hearty welcome from his old associates who were glad to hear that he had become associated with the Continental Grain Company.

William Benkert, who was for years identified with the grain trade in Chicago, principally as export manager for the Armour Grain Company, came to this city a few months ago and was recently elected a member of the New York Produce Exchange. He will transact a general c. i. f. brokerage business.

Members of Produce Exchange and especially in the flour trade were surprised to hear that their old friend, T. C. Estee, had relinquished the management of the New York office of the Washburn Crosby Company to W. R. Morris, who was formerly manager of the mill operations in Kansas territory. It was said that Mr. Estee had decided to lessen his heavy burden when he was recently elected vice-president of the company, but he will continue as resident director in New York City.

Members of the New York Produce Exchange heard with much regret that their esteemed associate, John Aspegren, had been seriously ill, following an operation for appendicitis. At one time his friends had become alarmed but were afterwards relieved to hear that he had improved. Mr. Aspegren is regarded as one of the leading figures in the cotton seed oil trade. At one time Mr. Aspegren was president of the Produce Exchange, and was the youngest president that organization ever had.

John Barrett, one of the leading grain operators on the Chicago Board of Trade, was visiting old friends in the local market late in October.

Members of the Produce Exchange and especially in the grain and feed trades heard with keen regret that their old friend and associate, Wright S. Travis, who for many years was a large receiver and distributor of grain, hay and feed, in this market was sick and his condition was serious. His illness was largely ascribed to his age, he being over 80, and his long and untiring labors in the market with which he has been identified, covering a period of over 50 years.

Mark Smith, Chicago grain trader, was visiting friends on 'Change late this month.

John W. Craig, head of the Atlantic Seaboard Flour Mills, located at Philadelphia, has been elected a member of the New York Produce Exchange.

Ed. H. Dobbs, formerly of the firm of Blake, Dobbs & Co., has gone with William H. Ellis, Inc., freight and shipping brokers.

For many years George K. Morrow, head of Morrow & Co., leading distributors of cereals was generally called "George" by his many friends, but lately many of them have been calling him "Dr. Morrow." It was asserted that this change was made because he has been recognized as what might be called a mercantile doctor. This new title was considered warranted because he had been selected to wind up the old American Cottonseed Oil Company, which through his efforts was afterwards succeeded by the Gold Dust Company, makers of "Gold Dust Twins." Result, a dividend of \$3.87 per share.

S. Finney, a grain trader of Chicago, was visiting friends in the local market late in October. It is assumed that he might become associated with the old cotton and grain house of Henry Hentz & Co.

Alfred T. Martin, one of the leading spirits in the old grain house of Bartlett Frazier Co., spent about a week with his old associates in the New York Produce Exchange, of which he has been a member for many years. At about the time he was interviewed May wheat was selling at \$1.44½ and Mr. Martin declared that would be the lowest price it would sell at this season, which opinion has been partly confirmed

thus far, as it has gone up more than 10 cents in the meantime. He also said he was bullish on corn and stated he would not be surprised if it went to \$1.50. This opinion was based on the assumption that there has been a crop calamity, as in his judgment there will not be over 2,000,000,000 bushels of choice merchantable quality, the rest being scarcely fit to feed hogs. He considered that the outlook for cotton trading on the Board of Trade was favorable.

Harry Winters, a member of the firm of Thomson & McKinnon, New York, and Chicago, was visiting the local office toward the end of October.

Ed. Hymers, a member of the firm of Jackson Bros. & Co., grain merchants New York and Chicago, was visiting friends on the New York Produce Exchange.

R. Wilder, assistant treasurer of the Grain Marketing Company, paid a short visit to the local market early in the month.

Clay B. Halboth of the Halboth, Coans Company, flour and cereals, has been elected a member of the New York Produce Exchange.

George E. Marcy and E. F. Rosenbaum, leading spirits in the Grain Marketing Company, came on from Chicago early in the month and spent several days with their associates on the Produce Exchange, of which they are members.

R. W. McKinnon of the firm of Thomson & McKinnon, grain and stock brokers of New York and Chicago, came on from Chicago late in October and spent a few days with his associates in the local market.

G. R. Roys, who for many years was connected with the old export house of Sanday & Co., latterly as secretary-treasurer, has become manager of the New York office recently opened by the Canadian Co-operative Wheat Producers, Ltd. H. G. Carter, formerly of Winnipeg, is chief assistant.

James G. Bennett, with Louis Dreyfus & Co., the large French export house, has been elected a member of the New York Produce Exchange.

A. H. Moberg, a grain trader on the Chicago Board of Trade, was a visitor in this market late in October.

Maurice J. Dugan, who has long been connected with the old house of P. Lenane & Bro., large dealers in grain, feed and hay, is an applicant for membership on the New York Produce Exchange.

B. W. Rosar, a representative of the Melady Grain Company, has been elected a member of the New York Produce Exchange.

CINCINNATI

HARRY A. KENNY - CORRESPONDENT

BUSINESS in the local grain and hay market during the past month was satisfactory both from the standpoint of volume and price. Receipts and shipments of grain and hay showed an increase over the previous 30-day period. While prices fluctuated during the fore part of the month, they stiffened toward the middle and closed strong. The outlook is encouraging from the viewpoint of the merchants, who anticipate continued good for the remainder of the year.

The Cincinnati Grain and Hay Exchange has renewed its lease for the Louisville & Nashville Railroad hay plug tracks for an indefinite period. The exchange has had continuous possession of the tracks since 1917.

Charles F. Wiedemann, president of the Wiedemann Brewing Company, and the Jacobs Brothers, hay and grain receivers, has made application for membership in the Cincinnati Grain & Hay Exchange. The latter company will succeed the Julius Jacobs & Son Company.

J. A. Hallam, chief inspector of the Cincinnati Grain and Hay Exchange, will attend the school in grading of grain sorghums, which will be conducted by the United States Bureau of Agricultural Economics. The school opens at Chicago December 8 and continues for four days.

Frank Magulre of the grain and hay firm of the same name has returned from an enjoyable 30 days' vacation spent in the western mountains of North Carolina. Charles Hill looked after the business during Mr. Maguire's absence.

Nieman & Nieman, dealers in flour, feed and grain, have moved their offices from the sixth floor in the Provident Bank Building to more commodious quarters on the third floor of the same building. The firm is

one of the youngest of its kind in Cincinnati and its principals are hustling members of the Cincinnati Grain and Hay Exchange.

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D. J. Schuh, executive-secretary of the Cincinnati Grain and Hay Exchange, will represent that organization at the annual meeting of the Ohio Grain Dealers Association at Columbus, Ohio, November 18.

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B. H. Wess, president of the B. H. Wess Grain & Coal Company, has acquired a large tract of land on Mitchell Avenue in Avondale, and in the spring will begin construction work on a modern subdivision to be known as the Wess Park Subdivision. The tract will contain from 30 to 40 building sites.

* * *

The first killing frost of the season visited this city October 22 and was accompanied by a minimum temperature of 30 degrees. The average date of the first killing frost in Cincinnati is October 25, according to the local weather bureau.

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Stocks of grain in first hands at Cincinnati November 8 were: Wheat 266,930 bushels; corn, 81,362; oats, 120,733, and rye, 5,711.

DULUTH

S. J. SCHULTE - - CORRESPONDENT

COMPARATIVELY few changes in commission houses and elevator trade circles have been announced recently on this market. S. A. McPhail, a former operator on this market has re-entered the trade here as the representative of Cross, Roy, Eberhardt & Harris of Chicago. H. W. Hilliar has removed here from Minneapolis and is connected with the Quinn, Shepardson Company. H. Wilson of the Cargill Commission Company has taken over the Duluth Board of Trade membership of J. H. McMillan, Jr. John H. Allen has joined the organization of the Occident Terminal Company.

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John D. Shanahan, who was a member of the Duluth Board of Trade from 1914 to 1916, but who is now associated with the Niagara Milling Company of Buffalo, was a recent visitor on this market. When here he arranged for the purchase of a substantial tonnage of Spring wheat for delivery at Buffalo before the close of navigation. Mr. Shanahan expressed himself as not too sanguine regarding the probability of grain handling and storage congestion being averted at Buffalo this fall. He pointed out that storage space down there is at a minimum and that with Canadian grain now moving down there in volume, Buffalo elevator interests are doing some tall figuring regarding how they are going to be able to take care of the end of the season rush.

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As illustrative of the extent of the export trade put through on this market during the last few weeks an official of one of the houses estimated that out of 26,500,000 bushels of Spring wheat shipped from the elevators here to the East from August 1 to November 1, 12,000,000 bushels were exported, and that of 16,500,000 bushels of Durum shipped during the same period, 13,000,000 bushels were exported.

All hands on this market are looking forward to the heavy movement from the country being maintained up till the close of lake navigation. The railroads found it necessary to clap another five days embargo against routings of grain from Northwest interior points to this market, an accumulation of over 14,000 cars between loading points in North Dakota and the Head of the Lakes terminals having come about. The brief breathing spell enabled the cleaning up of the congestion, and everything subsequently ran smoothly. With current receipts here of all grain, however, still running at from 950 to 1,200 cars daily, the elevators have all along during the last few weeks been operating at a feverish pitch in the effort to keep their receiving slips clear. Serious thought is being given to the storage situation during the winter. As of November 10, the elevators at Duluth and Superior had approximately 27,000,000 bushels of all grains in store. The outcome of the fight to ward off nearby handling congestion was therefore conceded to hinge upon the export movement at the seaboard being in sufficient volume to enable Buffalo elevators to take care of the rush of receipts during the fall end of the lake navigation season. Any slowing down in foreign buying would, it is felt, inevitably bring about a tieup at this end, with cars of grain backing up to shipping stations over Minnesota and North Dakota. As only a small proportion of the interior elevators are reported to have any amount of storage space available, an authority figured that almost a complete cessation of marketing by farmers might be found necessary. Grain men at this end, however, expressed themselves as hopeful that the great bulk of the supplies in store here will be moved East between now and the close of navigation, thus affording the elevators the opportunity to continue the receiving of grain from the

country in a normal way during the winter. Shipping interests here are not by any means sanguine regarding the probability of any substantial amount of steamer storage space being available at this point in case of emergency during the winter on account of slackness in the movement of coal to furnish up cargoes. Vessel freight rates were also claimed to have sunk to an unprofitable level, and in consequence numbers of smaller carriers have gone out of commission for the season. Grain space for Buffalo delivery from the Head of the Lakes was sold recently at two cents a bushel but the rate has since moved up to 2 1/4 cents. Space for Buffalo delivery at the end of November to include winter storage has been contracted for at from 4 1/2 to 5 cents. Two years ago boat space for November loading sold at 6 1/2 cents and the trade generally howled over it.

* * *

The Peavey Elevator here set a record recently in the loading out of a cargo of 610,000 bushels of oats for Buffalo delivery. Another bumper cargo of slightly over 600,000 bushels of oats was loaded out from the Consolidated Elevator and it is understood that other large oats cargoes are to be loaded out to hold for winter storage at Buffalo. Every effort is being made by the elevators here to cut down their holdings of oats now aggregating around 7,500,000 bushels in order to make space for Spring wheat and Durum which are being rushed forward to the terminals from interior points. Demand for oats has been found slow lately, but it is figured that opportunities to market them will be afforded in the East during the winter so that holders are desirous of running them out.

* * *

Officials of the Minnesota State Grain Inspection Department here have noted that wheat from some North Dakota districts has been showing deteriorations of one or two grades lately as a result of dampness brought about through delayed threshing on account of excessive rains. While more or less toughening has been shown it has not been necessary to put any amount of that grain through driers at the terminal elevators as far as could be learned. The inspection departments at Duluth and Superior have been working long hours ever since Labor Day and they are considered to have coped with the record-breaking handling situation remarkably well. The State Board of Grain Appeals at Duluth has had remarkably few applications for reinspections so far this season attributable to the average high grading of the wheat and other grains marketed.

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It is only within the last few days that dealers in feeds have been doing any volume of trade on this market, according to R. M. White, of the White Grain Company. Owing to the unusually mild weather over this territory livestock men were able to keep their cattle out at pasturages uninterruptedly this fall and little feed has been used so far in this territory. Mr. White expressed himself as optimistic regarding the outlook for trade in feeds and coarse grains during the winter months. He is counting upon the results of the presidential election leading to a general revival in trade over this territory during the next few months. A heavy expansion in demand for feeds and hay from lumbermen over northern Minnesota is confidently looked for.

* * *

Watson S. Moore of the Moore Grain Company is devoting his attention to operations on this market after a short visit to his New York office. He expressed gratification over the manner in which foreigners have been coming into the American market for supplies and he looks forward to this country's entire surplus of grains being absorbed at good prices.

* * *

As usual, the Barnes-Ames Company has been a consistent supporter of the Durum wheat on this market all season. Percy Ginder, who is handling the business at this end for his house, is credited with being a canny buyer. It has been noted that he seldom climbs for anything in the pit and that he usually succeeds in putting through his trades there at the most favorable moments from his point of view. The Barnes-Ames Company and its connections are conceded to have put through an enormous volume of trade this season at the various markets upon which they have been operating.

* * *

The Cargill Commission Company has been prominent in the rye trade here this season. F. E. Lindahl, manager of the company, has been coming in for congratulations in trade circles for his shrewdness for sticking to the rye game, and being chirpy when its market was sloppy at around 60 cents a bushel early last spring. He based his confidence upon the expectation that Russia would have little or no rye available for export this season and the assumption that buying by Germany in this country would be on a large scale after the Dawes reparations plans became operative.

* * *

For the first time in the history of the trade grain receipts on the Duluth market have been leading the Minneapolis figures this fall. From the opening of the new crop year, on August 1, to November 9, receipts of all grains on the Duluth market aggregated 119,725,069 bushels as compared with 105,655,060 bushels at Minneapolis up to the same period. Wheat receipts at Duluth aggregated \$58,354,480 bushels as against

51,236,200 bushels at Minneapolis. The rye movement at Duluth was the heaviest volume in the experience of operators on this market, aggregating 26,451,900 bushels last month as compared with 5,399,170 bushels at Minneapolis. Barley receipts footed up at 9,976,305 bushels against 5,399,170 bushels at Minneapolis; flaxseed at 9,868,794 bushels against 6,622,110 bushels at Minneapolis. Minneapolis, however, set the pace in oats with receipts of 30,500,800 bushels against 14,194,343 bushels at Duluth.

* * *

Officials of the Occident Terminal Company asserted that their volume of trade so far this fall had greatly exceeded their most optimistic expectations. Heavy shipments of Spring wheat and Durum have been made to the company's milling connections, the Russell-Miller Milling Company at Buffalo. The machinery in the new Occidental Elevator at Duluth was asserted to be working smoothly, and fully up to the registered car unloading and boat loading capacity of the plant.

INDIANAPOLIS

S. F. LARRIMORE - - CORRESPONDENT

THE three principal items in the local grain and hay market—wheat, corn and hay, have been very steady during the past 30 days, with very few changes or events of any importance. Wheat has pretty much settled down to its regular pace that will be maintained, no doubt, with but very little variation on into the next harvest. Inspections vary somewhat, running all the way from a daily average of 10 to 25 cars. Prices are fairly steady, remaining closely around \$1.44/1.45 for No. 2 Red and \$1.38/1.40 for No. 2 Hard. Slight raises and decreases from these figures were noticeable at times, but these prices about represent the Indianapolis wheat market for the last three weeks in October and first week of November.

* * *

Plantings throughout Indiana for the 1925 wheat crop are about completed, with some acreage here and there still being put in, mostly in the southern part of the state. Figures are not available at this writing as to the probable total acreage, nor how it will compare with the present year just ended. The writer has just returned from a trip over southwest Indiana. Except for that section below the B. & O. Railroad, very little planting was in progress. A good deal of new wheat has come up sufficiently to tinge the ground green and seemed in excellent condition. The unusually mild weather that has prevailed since planting has rather stimulated this growth, though dry weather no doubt has hindered sprouting. A snowy winter early would be a big help to this new wheat, some farmers stated, in helping to prevent too much freezing when real cold weather does come.

* * *

There has been more change in the outlook of the Indiana corn crop than any other item on the local market. It is said that the continued mild weather has matured thousands of bushels of wheat that would not have graded above poor otherwise, and there now seems to be ample corn for general needs. Of course, there will be large quantities of shriveled corn out of this year's yield, but the amount will not be equal to what was expected 30 days ago. The yield per acre is good in all fields maturing prior to the first killing frost, and much of the corn that was nipped by that frost bids fair to test much better than expected owing to drying out, etc.

The prize yield per acre seems to be on the farm of George Yarling in Shelby County, near Shelbyville, Ind. The five-acre tract he had entered in the statewide contest averaged better than 110 bushels per acre. The report is vouched for by county agriculture experts. The five acres had formerly been Bluegrass sod, used for pasture of live stock.

* * *

Indianapolis cash corn prices for the past 30 days were as high as \$1.01 for No. 2 White to 93 cents for No. 3 Mixed, the average price for all corn being in the neighborhood of 95 cents. Very little comment was available regarding oats. Prices 43 cents to 46 cents, averaging about 45 cents. There is a good steady demand.

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Price and demand on corn have been, and continue to be affected considerably by the abundance of hay on the market, many feeders preferring to use hay, with oats once a day, to buying or using corn. Also the continued mild weather has permitted a good deal of grazing in rural districts, and this has kept down the consumption of corn. It is believed that most of the shriveled corn will be retained for feeding purposes near home, and very little of it is expected to reach this market.

There is but little demand in Indianapolis for poor or weedy hay. The receipts of finest and second grade hay are quite ample to meet the demand, with a resulting restricted market for lower grades. Considerable hay comes in to this center by wagon load from adjacent farm counties and most of this hay is used

right here in Indianapolis. The shipping demand to the South and Southeast is also good, but for the better grades. No. 1 Timothy sold for \$16 to \$16.50 per ton on November 5. No. 2 sold for \$12 to \$14 on the same date. Mixed No. 1 was priced at \$14 to \$15, with \$12 to \$14 for No. 2 Mixed, the exact price depending upon condition.

* * *

A second payment totaling 15 cents was paid a few days ago by the Indiana Wheat Growers Association, to members for every bushel of wheat delivered to the wheat pool. It was also announced that checks would be mailed soon to farmers who had stored their wheat at the farms until it was called for by the Association. About 7,500 wheat growers were affected, of which number 4,000 had delivered their wheat and some 3,000 are still holding theirs subject to call. A total price of 85 cents per bushel has been paid so far, and additional payments will be made as more sales of wheat are completed. Association officials expressed themselves as optimistic over the outlook.

DENVER

T. V. KIRK

CORRESPONDENT

BUSINESS has slowed up some from what it has been in the past few weeks on account of a limited supply of Soft wheat and the skepticism of the buyers. There have been some contracts offered but the prices have not been very attractive. Some of the mills have received bids from Italy and the United Kingdom for large quantities of flour but the prices were not remunerative and besides the local demand will take care of the present situation. A good business is expected in the near future as it is reported many stocks are getting low and the buyers are now beginning to replenish them.

A few cars of new corn have arrived in Denver which appear to be of a very good quality. However the crop will fall short several thousand bushels from last year's figures on account of a dry season. This will naturally create a demand for Kansas and Nebraska corn.

* * *

F. R. Houlton, of the Houlton Grain Company, has just returned from a trip to eastern Colorado and western Nebraska, calling on the trade.

* * *

A. P. Parker of Wray, Colo., a large producer of wheat, was recently in Denver.

* * *

David Hoch, owner of the Forty-eight Star Mill at Albuquerque, N. M., recently met with a serious accident, which resulted in losing his right hand in the rolls. A similar accident some years ago caused Mr. Hoch to lose his left hand. Mr. Hoch is well known in the Southwest and his misfortune is regretted by many.

TOLEDO

S. M. BENDER

CORRESPONDENT

THE Toledo Exchange was closed on election day, November 4, with other Exchanges. Members and their friends were found on the golf links or fishing the nearby waters after they had cast their vote and told friend wife how to vote.

* * *

Rush Croninger of Grand Rapids, Ohio, who has been able to travel extensively over the entire state during the past month has found very few fields that will be worth cutting. He has been forced to stop unloading new corn because so much was rotten.

* * *

A. Mennel, senior member of the Mennel Milling Company, who is spending the winter in Florida, is reported to be in very good health and enjoying the sunny southland.

* * *

Charles Keilholtz of Southworth & Co., and C. L. Cannon, Federal grain supervisor for this district, attended the Michigan-Wisconsin football game in Ann Arbor during the month.

* * *

K. D. Keilholtz of Southworth & Co., and John Husted of the C. A. King & Co., were in Chicago calling on various grain brokers.

* * *

A request by several grain dealers in Van Wert and surrounding counties that the Ohio Grain Dealers Association hold a meeting in their section was approved. The members responded with a large attendance at Van Wert, Ohio, the evening of October 29. The meeting covering northern Ohio was held at the Avery Inn at Wauseon, Ohio, the evening of October 31, and was well attended. The Ohio Association is

sponsoring several group meetings somewhat after the fashion set by the Millers National Federation. It has been found that this policy gives every member a more thorough idea of the objects of the organization and an opportunity to become acquainted with the officers. Several good speakers are secured each time and subjects of interest to all are assigned.

* * *

Harold Anderson, vice-president of the National Milling Company, was in the eastern states during the month calling on representatives in that territory. He was also chosen by the directors of the Y. M. C. A. to head a city-wide campaign to increase the membership of that worthy institution.

* * *

The regular monthly meeting of the Northwestern Ohio Farmers Grain Dealers Association was held in Bowling Green, Ohio, the first Monday of the past month. Many Toledo dealers attended and were called upon to give their ideas marketwise.

* * *

The fine fall weather of the past several weeks has been worth thousands of dollars to the farmers of central Ohio. The warm sun with practically no killing frosts has greatly improved the corn outlook and saved much that was despaired of earlier in the season.

* * *

Visitors during the past month include W. J. Johnson, grain dealer of Napoleon, Ohio; Edgar Thierwechter, miller of Oak Harbor, Ohio; Rush Croninger, elevator manager of Grand Rapids, Ohio; Charles Kieser and Mr. Young of the Kasco Mills, Inc., of Waverly, N. Y., and Toledo; F. S. Lewis, grain broker of Chicago, Ill.; Del Lloyd, Waterville, Ohio; Frank Parrott, Haskins, Ohio; Sam Rice, Metamora, Ohio; H. H. Prickett, Fayette, Ohio; L. M. King, seed dealer of Milwaukee, Wis., and E. N. Fairchild of the Fairchild Milling Company, Cleveland, Ohio.

* * *

Since some farmers have started to cut their corn they are finding it not up to the standard they had anticipated. Much of it was found to be soft and the fodder was green.

* * *

C. S. Coup, vice-president and general manager of the Northwestern Elevator & Mill Company; David Anderson, president of the National Milling Company; J. D. Hurlbut, treasurer of the Toledo Grain & Milling Company; and Mark and Louis Mennel, president and vice-president respectively of the Mennel Milling Company, attended a session of the Millers National Federation held in Chicago during the month.

* * *

Louis Mennel, vice-president of the Mennel Milling Company, was in the East for a few days during the month calling on their eastern sales organization.

* * *

Frank C. Bowes, manager of the Kasco Mills, Inc., in this city has applied for membership in the exchange and the application was posted during the month.

* * *

The Ohio Grain Dealers Association held a meeting in Norwalk, Ohio, the evening of October 23, and short addresses were made by President S. L. Rice and several others.

* * *

J. R. Martin of Minneapolis, Minn., former partner of W. H. Haskell, retired miller and banker, was calling on his Toledo friends during the month. Mr. Haskell is now an officer and director of one of Toledo's largest banks. He and Mr. Martin were formerly in the grain salvaging business and later Mr. Haskell ran the Haskell Hominy Mills in Toledo.

* * *

Toledo flour stocks on November 1 as reported by local mills were 32,525 barrels against 28,000 barrels on October 1 and 37,000 barrels a year ago on November 1.

* * *

Grain inspections for the month of October were 761 cars of wheat, 261 cars of corn, 256 cars of oats, 49 cars of rye and 2 cars of barley; total 1,329 cars.

* * *

Ohio millers report some farmers still sowing Winter wheat while others are busy in the corn fields. Farmers are holding grain wherever they can and the flour sales down state have been rather slow. The new wheat that has been seen around southern Ohio is up about four inches and appears to be off to a good start. Rain will be needed soon in many parts of nearby states or the ground will be too dry to give new wheat the proper send-off.

* * *

E. L. Southworth, senior member of the firm bearing his name, and Henry W. Devore, senior member of the firm of H. W. Devore & Co., were elected to a life membership in the Toledo Produce Exchange at a meeting of the Board of Directors the past month. The application of Charles Keilholtz of Southworth & Co., and Chris Wessendorf of H. W. Devore & Co., were presented to fill vacancies caused by the elevation of the senior members to life membership.

* * *

L. J. Tabor, of Columbus, Ohio, master of the National Grange, has been appointed by President Coolidge to serve on a commission to investigate agricultural conditions. He issued a statement shortly after his appointment as follows: "A statement of legis-

lative policy will be out of place before the commission has met or has held a conference with the president. However, organized agriculture feels the present administration has an earnest desire to present sound and practical measures for the improvement of our present agricultural conditions. The commission can be of great value in co-ordinating with the various farm interests of the nation and presenting a solid front. The agricultural situation is improving and should continue to improve if we will but apply the wisdom gained from the recent depression with business methods and common sense."

* * *

The demand for all grains in this market the past month has been fairly good in spite of the wide fluctuations of the futures market. Wheat especially has found its way into the bins of local flour and feed manufacturers and to many points in the sunny South. Flour demand has been good all month and the millers say the situation this year is unusual in that buyers held off when prices were cheap and must now pay the price. The stocks of flour in all positions are small and the consumer must replenish them often. The export trade has also taken liberal quantities of flour the past month and millers believe they will be constant buyers during the season. The coarse grains have been subjected to an avalanche of selling but are now showing signs of bull fever again. The field seeds have been well bought all month and clover especially seems destined to sell higher. Alsike and Timothy are being bought on all reactions and seeds will be wanted in the spring according to local seedsmen.

PHILADELPHIA

WM. A. LOCKYER

CORRESPONDENT

THE Commercial Exchange, representing the big grain and flour interests of the city, has just staged perhaps the most impressive function ever held in behalf of the Port of Philadelphia. Working in conjunction with Mayor Freeland W. Kendrick, this organization on November 12, brought approximately 500 leading industrial, railroad, maritime, financial and commercial leaders of the country to Philadelphia and under the sponsorship of Hubert J. Horan, president, told them exactly what the port can do in the way of prompt dispatch of overseas commerce. Its facilities at the present time, it was emphasized, are unexcelled elsewhere and with these constantly being augmented, the city is in a position to handle twice the volume of business that is moving over its piers. The meeting with these outside interests was held in the Manufacturers Club and was in the nature of a banquet, with Mayor Kendrick presiding. Whole-hearted support was given by the membership of the exchange and the big elevator interests here and outside the city were strongly represented. Plans for the gathering had been going on for several weeks.

The Commercial Exchange is responsible for much of the tremendous export business the port of Philadelphia enjoys and it was to crystallize public sentiment not only outside but within the city and state as well, that the gathering was held. The advantages of the port were cited to show the economies and benefits of exporting through here, and representatives of New York shipping interests were given convincing arguments for the establishment of additional sailings from Philadelphia. The heads of the large railroad systems of the East were present as were representatives of the Shipping Board from Washington and the mayors of every important industrial and commercial center of Pennsylvania, Delaware and New Jersey. United States Senator George Wharton Pepper was among the speakers. Such factors in the grain trade as J. Barstow Small, president of the New York Produce Exchange; Frank L. Carey, president of the Chicago Board of Trade, Adelbert M. Mears, president of the Baltimore Chamber of Commerce, and Gray Silver, president of the Grain Marketing Company of Chicago, were among the specially invited guests.

The executive heads of virtually every trade and commercial organization in the city participated in the meeting, which was arranged by such representatives of the grain interests as Daniel J. Murphy, George M. Richardson, C. Herbert Bell, Howard P. Brazer, E. H. Price, B. C. Dickinson, S. L. McKnight, A. L. Hood, E. W. Rice, Jr., R. L. Miller, Filson Graff, A. D. Acheson and Philip Markley. Walter K. Woolman and James L. King, former presidents of the Exchange, and H. Dewitt Irwin, head of the firm of Barnes, Irwin & Company, grain exporters, also assisted in the arrangements for the meeting.

* * *

Movement of flour and grain through the Port of Philadelphia during the month of October, according to statistics compiled by the Commercial Exchange, was as follows:

Receipts—Flour, 301,578 barrels; wheat, 3,792,415 bushels; corn, 95,891 bushels; oats, 208,355 bushels; rye, 269,599 bushels; barley, 149,231 bushels.

Exports—Flour, 74,528 barrels; wheat, 2,577,902

bushels; corn, 21,147 bushels; oats, 179,519 bushels; rye, 269,599 bushels; barley, 149,231 bushels.

For the 10 months' period, the movement, compared with last year, has been as follows:

RECEIPTS—(10 months)	1924	1923
Flour, barrels	2,096,926	2,528,875
Wheat, bushels	23,621,167	26,768,197
Corn, bushels	2,490,922	6,042,017
Oats, bushels	2,173,610	3,114,074
Rye, bushels	1,593,808	690,963
Barley, bushels	384,084	42,488
EXPORTS—(10 months)	1924	1923
Flour, barrels	351,298	495,377
Wheat, bushels	22,384,962	24,868,299
Corn, bushels	1,711,050	4,330,541
Oats, bushels	873,083	436,789
Rye, bushels	1,358,049	615,687
Barley, bushels	397,728	24,935

On November 1, last, there were in Philadelphia public warehouses 117,725 barrels of flour; 2,381,672 bushels of wheat; 59,360 bushels of corn; 158,045 bushels of oats; 237,547 bushels of rye, and 52,351 bushels of barley.

In its review of October conditions, the Philadelphia Reserve Bank summarizes the local flour and grain situation thus: "The further advance in flour and wheat prices this month has not influenced buyers of flour to make larger commitments for future needs. Hand-to-mouth buying is still the practice of consumers and the domestic demand continues to be fair, showing a slight increase over that of last month, but being at least 10 per cent lighter than in October, 1923. The export market is more active than it was in the two previous months, but foreign purchases of flour are not as large as they were a year ago. Millers in this district report that the domestic demand has increased somewhat and that most of their output is going into local consumption. Early in the month the prices of wheat advanced sharply, but a recession soon followed which lasted over a week. However, the decline was checked; prices are again rising and are now higher than they were at the beginning of the month. The strong position of wheat is directly reflected in the price of flour and the lower prices which were expected after the new crop flour appeared in the market have failed to materialize. By-product feeds, such as bran, gluten, and middlings, are selling well and the demand for these is greater than it was last month and heavier than it was in October, 1923."

Spontaneous combustion is believed to have been the cause of the fire which partially destroyed the Merchants Warehouse, Front and Berks Streets, this city, the latter part of October. Several hundred tons of hay, grain and feed, stored in the building, were destroyed. The damage was estimated at nearly \$50,000.

Harvey C. Miller, president of the Philadelphia Tidewater Terminal, has recently returned from an extended business trip through the Middle West and reports that flour and grain interests are now booking business from abroad that they have not enjoyed for years. Shipment of 40,000 barrels of flour, for foreign account, is soon to move through Philadelphia from a Minneapolis mill. He also reports that a considerable quantity of agricultural machinery is going to move this way.

Walter T. Roach, chairman of the Philadelphia Committee on Uniform Grain Engagement Notes, has received information to the effect that the Special Grain Engagement Note Committee has again decided to postpone the date the engagement notes will become effective until on and after December 1, next, in view of the present negotiations with the committee representing the North Atlantic Export Grain Association and the Steamship Engagement Note Committee.

For the information of members when estimating demurrage and storage charges, a revised list of holidays, national and state has been posted on the bulletin board on the Commercial Exchange floor. It was revised by the American Railway Association and is being distributed by the National Industrial Traffic League.

L. A. Glessman, who has been engaged for the past few years in the milling business at Connellsville, Pa., has purchased the Springboro Milling Company, at Springboro, Pa., and will operate it in connection with his Connellsville business. Howard Glessman, son of the purchaser, will assist in the management of the Springboro plant.

Owen P. Brosius, of Christiana, Pa., has retired from the milling business and is now traveling for Levan & Boyd, wholesale grain and feed dealers, of Lancaster, Pa.

The Co-operative Buyers' Corporation has been incorporated under the laws of Delaware for the manufacture of flour. The incorporator is F. L. Mettler, of Wilmington, Del., and the capital is \$20,000.

John B. Mattheai, traffic manager of the Commercial Exchange, has advised the trade that changes have been made in lake and rail bases for rates on flour and other grain products from the west so that there are now no lake and rail rates to stations on the Reading Company and the Central Railroad of New

Jersey, and connections, when shipments are routed via the Great Lakes Transit Corporation and the C. & B. T. Co., in connection with the Erie and D. L. & W. Railroad. However, the rates still apply to the Reading Company and Central Railroad of New Jersey and connections via Buffalo and the Lehigh Valley and the New York Central Railroads.

H. J. Lerch, of Treichlers, Pa., has succeeded S. High Levan, as second vice-president of the Pennsylvania Millers Association; while H. H. Greybill, of Harrisburg, Pa., has been elected a director to succeed F. A. Wyckoff, of East Stroudsburg, whose term had expired.

Emil P. Albrecht, president of the Bourse, addressed members of the Philadelphia Traffic Club at their November meeting and urged them to take a greater interest in the movement of business through the Port of Philadelphia.

Grain unloaded at the Port Richmond elevator of the Reading Company during the month of October included the following: Wheat, 1,121 cars; rye, 141 cars; barley, 122 cars, and oats, 23 cars. At the Twenty-ninth Street Elevator of the same company, 45 cars of miscellaneous and mixed grains were handled.

Recent visitors on the Commercial Exchange floor in the Bourse included L. G. Smith, of New York; H. R. Smith, of Baltimore; W. B. Swartz, State College, Pa.; J. S. Whittington, Baltimore; G. H. Heller, of Memphis, Tenn.; C. E. Mounts, of Reading, Pa.; J. E. Bailey, of Minneapolis; L. P. Mitchell, of Kansas City; J. C. Moyer, of Menominee, Wis.; John West, New York; Daniel A. Laing, Corpus Christi, Texas; Gabriel Francis, Garrison, N. Y.; W. K. Houser, Phillipsburg, N. J.; W. V. Gaillard, Trenton, N. J.; H. B. Eastburn, Bristol, Pa.; Owen J. Breen, Margate, N. J.; J. B. Heather, Maryland, Md.; Charles Rodgers, Centre Ridge, Pa., and M. Jarret, Traubersville, Pa.

ST. LOUIS
J. O. MORRISSEY - CORRESPONDENT

DURING the first half of the past 30 days wheat prices held firmly. There was a good, steady demand from exporters who were taking off grades in good fashion along with the better grades. Elevators have continued well filled with wheat the most part of which has been sold for export and to mills. Shipments on export orders out of this market have been held up owing to a lack of barges in which to make shipment. This has resulted in some congestion which in time will be relieved. Ten days prior to election was about the beginning of sagging wheat prices which continued until after November 4. During this stagnant period exporters were disinterested and but little business was worked, which reflected itself in cash markets working off. Millers were not selling any volume of flour, only the trade that absolutely needed quick shipment flour were willing to risk purchases. Naturally millers did not buy the choice wheat offered them and the milling wheat market became sluggish with the probable exception of the very choice No. 1 and No. 2 Red wheat. This class of wheat has been in good demand since the beginning of the crop and mills for the most part have stored it away for future use. Since election prices have been soaring and exporters have started to make further purchases, millers have been getting good volumes of business from almost every section of the country and have been good buyers of the better grades of wheat. Option markets have been followed in the advance by the cash markets. The past few days have seen large daily advances in wheat prices until at present millers advise that flour prices are working too high and the trade is becoming alarmed. Since the milling demand directly is affected by the attitude of the flour buyer it is interesting to note that the majority of bakers and jobbers are fairly well stocked and are content to look on for a while to see whether the wild advance will hold or is just the speculative element taking advantage of the turn in political fields.

Receipts of oats in the St. Louis market have not been heavy, in fact they have been disappointing inasmuch as the prices offered by local firms have been higher than Chicago or other markets. Another feature which local people anticipated and which did not develop was a large movement of oats from Iowa. This was anticipated because it was thought that elevator operators in the section mentioned would be making room for the coming corn crop. The demand for oats has been very good and has been general both from local handlers and from shipping trade. Shippers had information that Cairo and Memphis were filled up and that the shipping demand out of St. Louis would slow up, but somehow the demand continues. The difference in the range on No. 3 and No. 2 continues to hold at around 1½ cents to 3 cents. The

weight on the oats coming in is good, mostly weighing 32 pounds or better, but the lack of white oats that grades high is due to color. There are very few cars that show the desired brightness of color.

Chester L. Weekes, until recently with Hunter Robinson Milling & Grain Company, is now conducting his own business under the name of Weekes Commission Company. Mr. Weekes has had more than 17 years' experience in the grain business in southwestern territories and will specialize in the purchase and sale of milling wheat in St. Louis.

The election returns were received on the Merchants' Exchange floor November 4. A great crowd of members, their families and friends attended. There was music and dancing.

F. I. Johnson, manager of the Peabody Milling Company, Peabody, Kan., was a visitor in St. Louis. The company has a mill at Peabody and elevators at Walton and Peabody.

L. P. Cook, of Memphis, Tenn., and Ernest McLemore of the City Mill & Grain Company, Columbia, Tenn., were admitted to membership in the Merchants Exchange.

Arthur Brockman, for many years a prominent member on the Merchants' Exchange and just prior to his retirement associated with Frank McClelland in the grain business, passed away during the October.

Another death of an old member of the Exchange was that of Jesse H. Holmes, for 35 years secretary of the Chase Bag Company. Mr. Holmes died at his home in Boulder, Colo.

The St. Louis Flour Trade Association held a quarterly meeting in October. Two new members were received, Oscar Wagner, of K. & E. Neumond, New Orleans, and Emil Summa, flour broker. A drive is being made by the association to increase the membership and to make a good showing on new members before the annual meeting in January.

C. A. Mahon, of the Mixed Feed Supply Company, St. Louis, spent a few days at the Alfalfa mill of the company in Kansas City.

Julius Cohn made a trip to eastern points on business. Mr. Cohn is president of the National Feed Company, St. Louis.

W. F. Walter, for seven years secretary of the Dreyer Commission Company left November 1 for Des Moines, Iowa, where he will enter a new field.

George Ziebold, of the Waterloo Milling Company, and E. C. Dreyer of the Dreyer Commission Company attended the meeting of Feed Control officials at Washington.

The Reid-Reck Flour Company has recently been organized by Harry Reid and Irwin Reck. Both members of this firm are widely experienced flour salesmen and have a large acquaintance locally and in Missouri and Illinois.

Chas. F. Hawe has been admitted to membership in the St. Louis Merchants' Exchange. Mr. Hawe, who for many years was with the American Hominy Company, has embarked in business here and will operate under the name of Charles F. Hawe Grain & Feed Company.

Memberships redeemed by the Exchange during October were those of Nat L. Moffitt, deceased, of Moffitt Napier Grain Company, and W. B. Anderson of Nanson Commission Company.

Memberships purchased and cancelled during the month: George Schoening of the Columbia Star Milling Company, Waterloo, Ill., Harold O. Hunt, St. Anthony Elevator, Minneapolis, George B. Tesson of Alhambra, Calif., and Walter Auferheide, St. Louis.

Adolph Gilster of the Gilster Milling Company, Chester, Ill., visited St. Louis for a few days on his way back to the mill from an extended southern trip. The Gilster Milling Company has recently enlarged its storage capacity by the addition of a new elevator.

C. J. Martenis of C. J. Martenis & Co., New York City, visited the Exchange during the month.

E. J. Gissler, secretary of the St. Louis Grain Club, issued a call last week for the members to attend a dinner at the Statler Hotel and later to adjourn to the Orpheum Theater. The response was good and many members turned out.

A. T. Edwards, seed dealer of Toronto, Canada, called here last month.

Charles Rippin, Traffic Commission of the Merchants' Exchange, advises that Ashley Paynor, division freight agent of the International Great Northern Railroad states that the duty on wheat into

Mexico is reduced one centavo per kilo and flour raised one centavo per kilo, making the present duty on wheat three centavos and flour nine centavos, subject to surcharge of 12.2 per cent.

H. M. Brandon, a grain dealer in Kingston, Jamaica, called on the St. Louis trade.

Joe Lamy, of Paddleford & Lamy, Chicago, visited the Exchange last week.

Henry Hoermann, chief flour inspector of the Merchants Exchange, advises 13,569 barrels inspected during October. Stocks of flour in St. Louis November 1 totaled 72,900 barrels as compared with 71,650 barrels on October 1 and 77,650 barrels a year ago.

Oscar Leonard, grain man of Bucharest, Rumania, called at the Exchange during the month.

Western railroads have filed with the Supreme Court a petition asking for a rehearing in the St. Louis Terminal Railroad case recently decided in favor of the eastern roads. In two cases cited the Terminal Railroad has been prohibited, the petition states, to engage as carrier in the transportation of through freight moving east and west across the Mississippi River, and had been restricted in its activities to those roads furnishing terminal facilities. Contrary to the restrictions, the petition continues, the court in its recent opinion has authorized the Terminal to act as a common carrier. Should the Terminal avail itself of these rights the petition contends that it would constitute a violation of the Sherman Anti-Trust Act as defined by the Supreme Court in former cases.

LOUISVILLE

A. W. WILLIAMS - CORRESPONDENT

NOW that the election is over and confidence has been restored, the grain markets have started upward, and indications are for strong markets over the next few months. Well posted grain men are contending that wheat will go to \$1.75 by the first of the year, and probably to \$2 before the next harvest, in view of the heavy export demand which is taking offerings of wheat and rye off the market, and in view of the light corn crop. It is also contended that oats are far too low as compared with other grains, and that an advance in oats is due to start shortly. The elevator companies here are crowded with storage grain, and it is one season in which elevator space has been steadily in demand.

With wheat wild over the period immediately after election and advancing 10 cents a bushel or more within four days, the market on all grains is feeling the bull movement. Old corn is getting scarce and higher. No. 2 old corn is quoted at \$1.15 in White, Mixed and Yellow, with No. 3, at one cent a bushel less. New corn is quoted at five cents under old. Some very fine quality new corn has been coming from southern Indiana, and the quality is much better than had been anticipated, in view of the numerous reports of early frosted corn. New corn is grading No. 3, on early arrivals, but it is admitted that there will be plenty of off grade corn later, and that much of this will need a lot of drying, although the unusually warm and dry weather of October and early November has gone a long way to dry out new corn. It is reported that so much rye has been sold for export that this item is also getting rather scarce.

The fall period brought out a good demand for rye, wheat, winter turf oats and barley for winter planting, but very dry weather over a period of two months or more had a tendency to slow up demand for seed grain, as it became too dry for planting. Rye, oats and barley have been selling for seed use through seed houses at around \$1.50 a bushel, including sacks, while wheat has been selling at \$2.

It is reported from various sections of the state that forest fires have been raging, and that considerable farm land has been burned over, and much corn in the shock, farm buildings, timber, etc., destroyed. Early frosts turned the country brown, and were followed by weeks of dry weather. Fires broke out during the first week of November in various sections of Kentucky and southern Indiana and have resulted in heavy losses.

The Kentucky Public Elevator Company, Louisville, according to F. C. Dickson, has been crowded for space all fall, and is having more business offered than it can handle. Daily handlings as a whole are quite fair.

Although it has been months since an accident at the plant of the Wathen Milling Company, in which two brick tanks of the elevator came down, spilling 50,000 bushels of wheat on the ground, nothing has ever been announced regarding cause of the accident, which many concede was due to collapse, but which

has also been argued as having been caused by a dust explosion. The Ballard & Ballard Company had the plant under lease at the time, and loaded with wheat.

Edward Scheer, of the Bingham Hewett Grain Company, reported that demand was only fair, but that outlook was good. Mr. Scheer remarked that he believed that cold weather would force up price of oats materially, as prices are now too low as compared with other grains.

The demand for millfeed has been fair, but offerings have been heavy and there has been some price shading. Jobbers are offering bran at \$30; mixed feed, \$32; middlings, \$34 and hominy feed, \$41. Some millfeed prices are considerably higher than these, at least on quotations.

The hay market has been a trifle weaker due to dry weather, good roads and free hauling. Quotations show No. 1 Timothy, \$19@20 a ton baled; No. 2, \$17.50@18; No. 1 Mixed, \$17@17.50; No. 2, \$15@16; No. 1 Clover, \$18; No. 2, \$16.50@17; wheat and oat straw, \$12; rye straw, \$14.

S. T. Ballard, of the Ballard & Ballard Company, will leave Louisville November 16, for Eau Gallie, Fla., where he will remain until spring. Mr. Ballard is still weak from an operation last winter when taken down with appendicitis while wintering in Florida.

Henry Freuchtenicht, Louisville hay, grain and feed dealer and elevator operator, has recently purchased and occupied a beautiful home on the Brownboro Road, just east of Louisville.

GRAIN NEWS FROM BOSTON

By L. C. BREED

Retail grain dealers of Massachusetts were notified some weeks ago, of a meeting to be held at Worcester for the purpose of forming an association. As the result of this call, upwards of 40 dealers from various cities were present at the meeting. An organization to be known as the Massachusetts Retail Grain Dealers Association was formed and the following officers were elected: President, William Morse of Holyoke; Secretary-treasurer, James A. Sturgis of Easthampton. Following the meeting in a short time, upwards of 100 concerns were enrolled as members of the association.

The question of continuing "Daylight Saving" has for some weeks occupied the attention of business men and farmers throughout Massachusetts. As a general rule farmers are opposed to the measure, which, it is claimed, operates as a handicap to agricultural pursuits. At the recent state election, the question was, among others, submitted to the voters.

New England agronomists recently held a conference in Boston, at which, among other matters, cattle feeding, crops and fertilizers were discussed. In the view of one of the speakers, the dairyman has the best chance for profit. Alfalfa in New England husbandry also received attention, and it was pointed out that hay was Massachusetts' largest and most valuable crop.

A special meeting of the members of the Grain Board recently was held, and after a discussion of the question of the trading room location, a committee was appointed to confer with the directors of the Chamber and report at a future meeting.

The Transportation Bureau of the Chamber is advised that complete inter-territorial proposals in Eastern Class Rate Investigation will be available for distribution in a few weeks. These proposals are formulated by the carriers and should be studied by shippers to ascertain whether or not their interests are adversely affected. In this way, when the hearing is announced by the Interstate Commerce Commission, it will be possible for shippers to discuss the issue in an intelligent manner.

In coarse grains a normal demand is going on. Feed is ruling dull in common with other markets, owing mainly to exceptionally open and mild weather which has prevailed this fall. The market for hay is dull with light offerings of the better grade. Low grades are accumulating and pressed for sale. Straw is ruling quiet and slow of sale. Receipts of hay in October, 466 cars, straw 22 cars.

An increase in the commerce of the port is noted by the statistics compiled at the custom-house for the month of October as compared with the corresponding month last year. During the month just closed, there arrived from foreign ports 117 steamers and 15 sailing vessels.

Among the visitors to the Chamber during the month of October, outside of New England, were the following: Riccardo Salmona, Naples, Italy; W. J. Shanley, New York City; R. C. Chambon, Pittsburgh, Pa.; W. V. Hamilton, Caledonia, N. Y.; F. W. Colquhoun, New York City; C. F. Spaulding, San Diego, Calif.; F. A. Sheldon and C. F. Sheldon, Greenwich, N. Y.; Edwin C.

Anderson, Saginaw, Mich.; H. G. Wilkinson, Montreal, P. Q.; C. B. Roger, Minneapolis, Minn.

Boston seed dealers have just closed a quite satisfactory season's business and are now making preparations to take orders for seed for spring delivery.

The Chamber's Committee on Foreign Trade intends soon to start a course on foreign trade for the purpose of giving practical information to all members interested in overseas trade. Eight lectures are being arranged.

Receipts of grain at Boston during the month of October were as follows: Wheat, 170,800 bushels; corn, 425 bushels; oats, 144,685 bushels; rye, 38,850 bushels; barley, 98,000 bushels; malt, 1,575 bushels; mill feed, 253 tons; cornmeal, 25 barrels; oatmeal, 12,392 cases.

CANADIAN CO-OPERATIVES TO BUILD AT BUFFALO

By ELMER M. HILL

Negotiations have been closed whereby the Saskatchewan Co-operative Elevator Company, Ltd., of Regina, Sask., will build a new 1,100,000-bushel grain elevator in the Buffalo harbor. The company has purchased a site covering 12 acres of underwater land from the Lehigh Valley Railroad Company for approximately \$25,000. The site is in the outer harbor off Tiffet street and large lake grain carriers will be able to reach the new elevator without the usual delays in navigating the winding Buffalo River or Blackwell Canal.

Bids for the construction of the sub-structure will be received by the company at its Buffalo offices in the Hurst Building, November 19. Several large elevator builders are planning to submit bids for the initial sub-structure, which will cost approximately \$200,000. Plans for the elevator construction are being completed by C. D. Howe & Co., Ltd., of Port Arthur, Ont., which has opened temporary offices in Buffalo. R. B. Chandler, of the Howe organization of consulting engineers, is in Buffalo to supervise the construction. No time will be lost in starting construction as soon as the contract is awarded.

The Saskatchewan Co-operative Elevator Company, Ltd., which will build the new Buffalo elevator, now operates approximately 500 elevators and grain storage plants in the Canadian Northwest, largely in the provinces of Alberta, Manitoba and Saskatchewan, and three terminal elevators at Port Arthur at the Canadian Head of the Lakes. These have a combined storage capacity of 20,000,000 bushels and a daily unloading capacity of approximately 500 cars. The company's main offices in Canada are at Regina, Sask., and its terminal elevator department is located at Winnipeg, Man.

The company handles approximately 30 per cent of the grain shipped out of the Canadian Northwest. F. R. Riddell, of Regina, is general manager of the company. The new 1,100,000-bushel plant at Buffalo is designed to handle the American business of the corporation. Its unloading capacity will be provided by two movable marine towers with a maximum capacity of 25,000 bushels per hour. The towers will be equipped with receiving garsners, scales, etc., with a direct spouting arrangement to all storage pits.

The facilities for unloading cars are provided by two elevator legs and two 2,500-bushel copper scales in the elevator cupola. The building will be of reinforced concrete construction throughout and will be absolutely fireproof. The elevator itself will cover a ground area of 1,500 by 400 feet. It is planned to have a receiving capacity of 300,000 bushels in 10 hours and a shipping capacity to cars of 160 carloads in 10 hours.

IN Tokio, the first estimate of the new rice crop is 58,139,470 koku (a koku is about 5.11 bushels), which is nearly 5 per cent better than last year's crop.

THERE will probably be a considerably larger importation of both wheat and corn from the United States, in Mexico, this year, as crops are unusually bad in the central states of Mexico, from which section Mexico City draws most of its supplies of corn and flour.

SERVICE IN ADVERTISING

By W. H. KENT*

It seems to me that there is no more significant word in the life of a business man today than the word, "Service". Service cannot prevail without truth, character, and quality intimately woven into its fabric. Therefore, in approaching the subject, "Backing up Advertising with Service", it is necessary at the outset, in the brief time allotted me, to define just what kind of advertising can be backed up with service.

It is self-evident that untruthful or misleading advertising cannot be so backed. By untruthful or misleading advertising, I do not mean to refer particularly to a studied attempt to produce such advertising. Ignorance of fundamentals might easily be the cause of untruthful and misleading statements. Advertising should reflect accurately and honestly the goods, policies, or intentions of the advertiser. Then it can and must be backed up by service if business is to grow and prosper. The question then is, what is meant by service and how are we to employ it.

The word "Service" should and must be reflected throughout the entire organization from the office boy on up to the very top. Without the co-operation of each and every one of the employees all along the line, the best laid plans, as can readily be understood, might easily go wrong. Beginning with the advertising department, it is quite necessary that the responsibility there should not be placed in the hands of an inexperienced individual. Too frequently that is done and what is the result? Inefficient, misleading copy. The main idea frequently seems to be to make the ad look pretty, fill up valuable space with catch-word phrases, or go further and represent something in a manner which cannot be backed up when the goods are delivered.

Advertising must be conceived honestly, with a firm determination to deliver the goods as represented. Otherwise service cannot be given and the advertiser will suffer as well as the customer. We will grant now that advertising has been carefully studied, is honestly conceived, and represents just what the seller intends it should. No more could be expected of the advertising department. It has accomplished its purpose, but advertising in itself means nothing if it fails to receive the wholehearted support of the entire organization.

It is surprising how trivial a thing may, in this department of service, turn a good customer from friend to foe. Suppose, for instance, the customer happen to be a local one and telephone in for information, is connected up with the wrong department, after several attempts finally gets the party who should be able to give him the information desired but does not because by doing so it entails a little extra exertion or inconvenience. Perhaps the clerk, not being thoroughly familiar with the subject, gives incorrect information. What is the result? The customer goes elsewhere and meets with friendly, instant and intelligent co-operation.

The result, as far as the first selected firm is concerned, is a loss which cannot be covered by the best laid plans of advertising. The second firm has rendered service and made a friend who will remember it the next time he is in need. So I say, the entire organization must be keyed to the meaning of the word, "service."

The sales department must do its part as well as the balance of the organization. Many thousands of dollars may be spent on an advertising campaign. Inquiries may flood the office as a result thereof, but of what avail is it all if the office is not organized properly to take care of it? Suppose the answering of inquiries is unreasonably delayed or is done in a haphazard, inefficient manner. The prospect's opinion of your service not only dwindles but a desired customer may be lost.

Have you ever stopped to figure the cost to your

organization of each inquiry received or order booked? If not, it might be an interesting experiment and a wholesome tonic for the bolstering up of service to do so and bring it to the attention of those interested.

Only recently the head of a large department of one of our local organizations told me that it was estimated each sale made in his department cost exactly \$8 and one of their greatest problems was to bring that fact home to their organization, particularly to those intrusted with the making of sales.

The salesman should necessarily understand the product which he is trying to sell. He should know its uses, its limitations, and, knowing all that, he should be imbued with the idea that the interests of his prospective customer are his. If his customer is not satisfied, and does not place his repeat orders with the salesman's house, there must be something wrong with the salesman and it should be the duty of the sales manager to find out just what it is. Certainly, that salesman is not giving service nor is he backing up the advertising policy of his house which should breathe service as well as quality.

Several years ago I heard the head of a large corporation ask another with a tone of admiration just how it was possible for him to make them, when in the market for material in his line, always single out his house in preference to several



W. H. KENT

others. He said, "I wish I could get you to impart your secret to our sales force." The question seemed to take the other by surprise and after a little thought he said, "Tom, I have been doing business with you about 15 years, have I not?" The answer was, "Yes". "Have I ever during that time created the impression that I was trying to put anything over on you?" Answer: "No." "On the other hand, have I not always looked after your interests as far as your purchases from our company are concerned as though they were my own?" Answer: "I believe you have." "Well", the salesman said, "I might sum up my creed as a salesman by saying that I believe everlastingly in not misrepresenting our product, making my customer's interest my own, and giving service in every way possible. If I cannot create confidence in another, both in myself and my line, I do not care to do business with him. There are other things in life besides business and one of the most valuable to me is friendship and self-respect."

The foregoing, you will have to admit, is a statement of service in its highest degree and cannot help produce results.

Contrast the policy of that salesman with the one who blusters into an office creating the impression that he knows just a little bit more than the party he is dealing with, or greeting the prospect, although an almost total stranger to him, as though he were a long lost brother. That is not service, not even tactful, and, although the prospect might have thought of purchasing goods made by his house, the acts of the salesman are such

as to turn him to another for his wants. I can call to mind numerous contracts which were lost to the house which originally had the inside track due to the overbearing, officious manner of its salesman. You ask, "How is that to be stopped?"

My answer is that the sales manager should know thoroughly the makeup of the man he sends out to represent the house. Furthermore, the sales manager should in some manner try to keep in personal contact with his larger accounts and be assured that the service the house wishes to give is being received by the customer.

Another point:—It should be a source of pride to have your trade mark or name appear in connection with your product. Every item which goes out of your plant should in some way be identified as coming therefrom. There is great satisfaction in being able to identify an article as having come from your plant, as indicated by your name appearing thereon.

To illustrate this point, I recall an experience many years ago at Omaha while attending a convention there. One of our good customers approached me in the lobby of the hotel and complained bitterly about the class of equipment we had furnished for a certain plant which he wished to buy. He stated that it was in such contrast to our equipment which he had in his own plant that he could not understand it. I told him it was easily explained as I happened to know all about the plant in question from its inception. The contractor had been a personal friend of mine and he wished me to furnish the machinery. I could not do so as I would not meet the specifications which plainly showed skimping throughout and which I felt were bound to give trouble if followed.

A jobbing house, knowing little about the adaptability of the equipment for the work to be done, did furnish same and bought one or two specialties from us which were standard and could not in any way be changed. It seems that the contractor had then shown these specialties to the owner and informed him that all of the equipment had come from our house.

I suspected such to be the case when my friend who wished to purchase the plant informed me he was told the equipment came from our house and I, in turn, requested that he make a very careful examination of the various parts of the equipment throughout the plant. If he did that it could be readily determined whether or not our equipment was furnished as our name would appear on each unit made by us.

The examination was made and it was found that not only was our name missing throughout, with the exception of the few specialties mentioned, but very few of the units had any name at all, the latter showing the product had been made to sell at a price, not to build up a reputation nor to give service. It is, therefore, important to know who are representing themselves as handling your equipment and to be sure they are not hedging with something which is represented to be just as good. In other words, couple up the activity of the sales department with that of the advertising department in the one word "Service". Do not wait for your prospects to see you. Try to go to them with your message, tell them what you have to sell, build around your product quality, truth and service.

You, of course, will have your misunderstandings, as all human beings do, but try to give the customer the benefit of the doubt. Do not feel that he is forever trying to get the best of you. He is just as honest and desires in his own line to give service. It is in co-operation with him that you are able to help him produce the results which he is seeking. By doing that his friendship for you is reflected in confidence and when in the market for material in your line he will think of you, first, last and always, as a house which will give him service in the fullest sense of the word.

ALL three Scandinavian countries obtained fair quantities of bread grain, principally rye, from Russia, last year. This year's supplies, in larger volume in the case of Sweden at least, must be secured from other overseas sources.

*An address delivered on November 6, 1924, before the Advertising Council of the Chicago Association of Commerce at Chicago. Mr. Kent is vice-president of the Weller Manufacturing Company of Chicago, well known to the grain and milling trades as manufacturers of elevating, conveying and power transmission machinery.

TO HANDLE "SUPERIOR" CUPS

To be thoroughly sold on one's product is the first requisite of good salesmanship, and to be "sold" by way of practical experience is far more useful and convincing than to absorb enthusiasm vicariously. This is the happy state of Charles F. Sanford of New York, who has just been appointed special representative of the K. I. Willis



CHARLES F. SANFORD

Corporation of Moline, Ill., to handle "Superior" Elevator Cups.

For some years Mr. Sanford was superintendent of the Municipal Elevator at New Orleans. In that capacity he had opportunity of studying the effectiveness of "Superior" cups under a great variety of conditions. He became an enthusiast for them at that time, and this will go far to ensure a success in his new work. Besides this familiarity with the product which he will handle, Mr. Sanford has a host of friends in the milling and grain trades and they will join in our best wishes for his success.

EARLY HISTORY OF THE ST. LOUIS EXCHANGE

The grain business in St. Louis is parent of a truly venerable institution, the Merchants Exchange, which was the successor of one of the oldest commercial institutions of the West. The extent of trade in St. Louis in the earlier days can be judged from figures given in a "statement of domestic produce and manufactures shipped from the port of St. Louis, destined to New Orleans, Natchez, Vicksburg, Memphis, Nashville, Mills Point, Helena and other places on the interior waters of the United States, in the year ending June 30, 1851." This interesting document specified 112,600 sacks of wheat; 415,624 sacks of oats; and 17,487 sacks of barley. At the same time the flour traffic amounted to 648,520 barrels.

This was the age of steam packets on the Mississippi, when the transportation afforded via the inland waterways was an important feature and railroading in the Middle West was undergoing its development. Those who contemplated going to the territories of Kansas, Nebraska and Utah were urged to avail themselves of the facilities for travel by steamer. Packets on the Missouri River operated in conjunction with the Pacific Railroad at Jefferson City.

Lands along the right of way of railroads going west, near Springfield, Ill., were being offered at between 15 and 25 dollars per acre. In the publicity matter of one organization interested in promoting sales of agricultural real estate in Illinois it was said that "the first crop on newly broken prairie is generally sod corn, as this requires no cultivation between planting and gathering, the farmer has ample time to get things comfortable about him, and prepare the land for sowing Winter wheat before cold weather comes on. This land has averaged from 30 to 35 bushels per acre, often

running up to 50. Wheat averages from 25 to 30 bushels an acre, frequently reaching 38 and 40, and during the past season has been selling at the various railroad stations at from \$1 to \$1.50 per bushel. The second crop of corn averages from 60 to 80 bushels, frequently giving 100."

While some of these figures sound unduly conservative in our day, they really were extremely optimistic in that day and age and were indicative of the fact that a good deal of land had to be sold and those who engaged in exploiting property in those days were not so far behind the modern prospectus writer. It should be remembered that at the period here referred to St. Louis had not yet achieved a population of 100,000.

Prior to this—in 1836—when the municipal population was around 10,000, a meeting of merchants and representatives of the different trades was held, and the St. Louis Chamber of Commerce was established. It did not resemble in any way our present organizations for a like purpose. It was a large market and commission house with arrangements for arbitration in disputes. In 1847 ground was purchased at the corner of Third and Chestnut Streets for the purpose of erecting an Exchange Building, and two years later the Merchants Exchange was duly established. It was carried on more or less in connection with the Chamber of Commerce.

Shortly afterward the Millers Convention was formed, and materialized into the Millers' Exchange at Nos. 9 and 11 Locust Street. It was the first exchange in the United States created for the purpose of bringing together buyers and sellers of grain. In 1855 a movement was started which culminated in the erection of the Exchange Hall on Main Street, which for many years was the great center of trade in the city.

During the Civil War political differences led to the organization of the Union Merchants Exchange, a name which was retained until 1875, when it was changed to the Merchants Exchange of St. Louis, and all the organizations were practically amalgamated. In 1874 the corner stone was laid for the present Chamber of Commerce, which still continues to be one of the finest exchanges of its character in America. James Cox has recorded these facts and a good deal of interesting data in a book entitled "Old and New St. Louis," which he published in 1894.

Some research among documents dating back to the period prior to 1860 will give a good idea of the appearance of the building used by the old

fight of steps. This room was 105 feet in width and 80 in depth; and it had a central rotunda with a dome. The interior was elaborately frescoed, and the south end of the hall was fitted with a reading room elevated about 17 feet above the main floor and reached by a circular iron staircase. On the third floor were the offices, 22 in number, and formed in a square about the rotunda. The expenditure contemplated when the plans were made was in the neighborhood of \$150,000, which at that time represented a very respectable investment for such a structure.

The accompanying cut shows a certificate issued in 1857 to Frederick Bransford, who was active in the grain trade during the days of the old exchange.

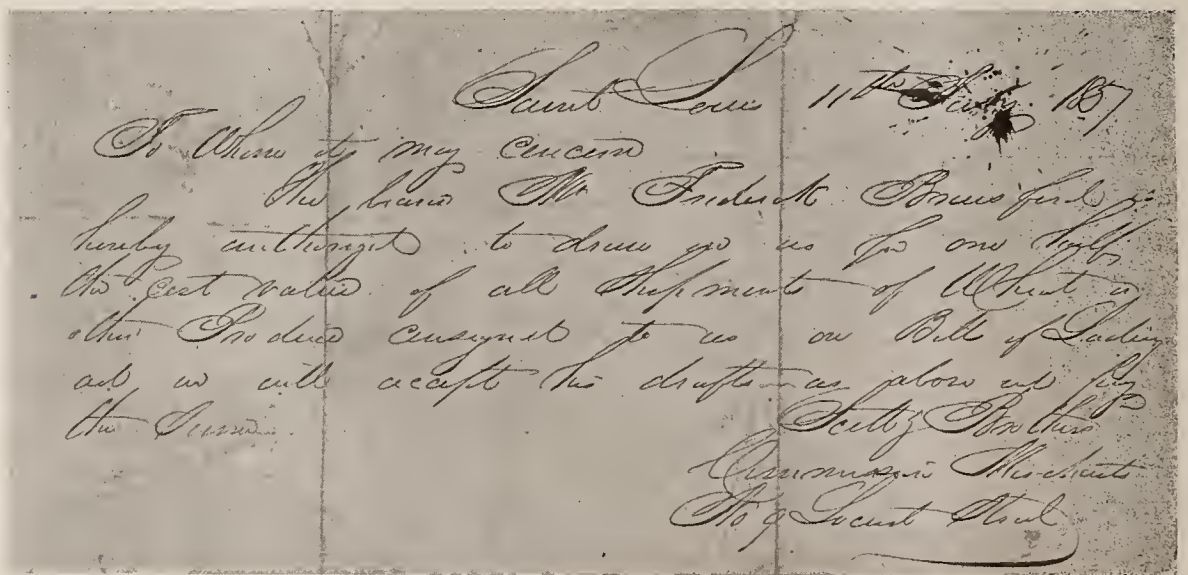
JAMES PATTEN DONATES VALUABLE SITE TO CHARITY

The Chicago Community Trust recently was the recipient of the site at the corner of Monroe Street and Michigan Avenue, in Chicago, from James A. Patten. This gift, valued at more than \$1,500,000, on which stands the University Club's well known building, was deeded to the Harris Trust Savings Bank, as trustee, and the income becomes available immediately for charitable purposes.

Clifford W. Barnes, chairman of the Chicago Community Trust, in announcing the gift, said it was the greatest ever given in trust. James Patten, whose fame as a grain dealer is widespread, designated a number of immediate beneficiaries, under the trust, including the Evanston Hospital, which is to receive one-quarter of the net income; Presbyterian Home, in Evanston, Ill., a like amount; and the remaining half of the income to go in equal parts to Blackburne University, Carlinville, Ill.; Lincoln College, Lincoln, Ill.; Lake Forest University, Lake Forest, Ill.; Illinois College, Jacksonville, Ill.; and for the benefit of Presbyterian students attending the University of Illinois at Urbana, Ill.

EUROPEAN CORN BORER PREVALENT

The Bureau of Entomology of the Department of Agriculture has lately called attention to the fact that the European corn borer is much more widely distributed than heretofore in northern Ohio and southeastern Michigan, and the degree of infestation has increased in several districts. Re-



FACSIMILE OF ST. LOUIS LETTER DATED JULY 11, 1857

Merchants Exchange. It was on Main Street, between Market and Walnut and made of fine-grained and shaded limestone obtained from a quarry near Allentown. The style of architecture was Italian, simple, dignified, and in good keeping with the necessities of the structure.

The facade on Main Street had a width of 153 feet and was 70 feet in height. On Main Street it was divided into three stories. The north and south entrances had projecting porticoes, supported by fluted and carved columns of Corinthian pattern, with bold moulded capitals.

The exchange room was reached by a broad

ports for northwestern Pennsylvania, western New York and Massachusetts are much more favorable. Results of cleanup work in Long Island in the vicinity of Brooklyn, are very encouraging.

THE Greek Ministry of Agriculture ascribes the decrease in all cereal crops this year to the long dry spells which adversely affected crop developments in Italy and other Mediterranean areas. The ministry estimates the crops this year about as follows: Wheat, 9,662,820 bushels; barley, 6,154,620 bushels; oats, 4,059,200 bushels; rye, 1,023,620 bushels.

Weight Supervision and Settlements

A Discussion of Terminal Grain Weighing Supervision and Terminal Settlement Weights as Viewed by Country Shippers

By BERT DOW*

WHEN our friend, Mr. Schmitz, asked me to address this meeting, I tried to make it plain to him that I did not have much of a message to deliver, and that I could say but very little that would be of any real benefit to you. To get up here before you gentlemen and start kicking about weights in the various terminal markets would be inconsistent on my part, as I believe there is very little complaint on the way that weighing is handled at this time, and I believe that you are doing all possible to improve your service to a point where there will be no complaints whatever. It certainly can be no more pleasant for you to receive complaints on your weighing than it is for us to make them.

In any market, as we country shippers look at it, there are three primary things that we look for; first a satisfactory price; second, good reliable inspection; and third, but the most important of all, good reliable weights. No matter what the grade and the price may be, if the weights are not reliable how long can that market retain the good will of and expect to be patronized by the country shipper? It does not take long for the shipper to make up his mind that he is not getting a fair deal on the matter of weights today, as generally he is shipping to various markets and has a very good opportunity to check his weights with those of the various markets to which he ships, and if there is one that is consistently short it will not take him very long to scratch that market off his list, regardless of price or inspection.

Years ago it was customary for a shipper to load his car of grain up to the grain line in the car, or load it reasonably full and let it go at that, but today the majority have loading out scales that are just as carefully tested, and just as carefully cared for as his wagon scales. Today when a country shipper loads a car of grain, he has a pretty fair idea of what that car contains and unless he receives returns for a weight that is reasonably close he wonders what is wrong. He goes over his scales, he finds them to be in perfect working order; he tries another market, gets good fair weights in his returns and the first market has lost a customer, and once lost on account of mis-weight or mis-grade it is mighty hard to get him headed back again. I am very frank to admit that with these smaller scales much lies with the man who is doing the weighing; one man can take these loading scales and obtain excellent weights while another will have a good deal of a variation, one is a careful man and the other is careless. Unfortunately, there are a few men at each end who are not careful enough with their weighing and supervision, and this simply makes trouble for you and themselves. As there is certainly nothing that I can tell you gentlemen about weighing grain in the terminal markets, I would like to take a few minutes to explain to you how we keep checked up on our loading weights at our own country houses.

We have both hopper and automatic scales and we obtain very good results from both. Where we have an automatic scale our agent is required to furnish us with a statement on every car weighed, showing the starting number and the closing number of his counter; the number of pounds to each dump and just how he arrives at the total weight. Where we use a hopper scale, we require a detailed statement of the weight of each hopper. We also get the numbers of the seals applied and if there is any difference in the seal record we immediately make an attempt to check it up. When our agents send their reports of loadings to us we check them carefully in the office to see that there are no errors in

their figures, and if we do find any mistakes in figuring we immediately call this to the attention of our agent so we have a good clear record of loading weights at both our country offices and our Davenport office. When we receive a destination weight and find a large difference we immediately write a special letter to the agent asking him to carefully check his loading records on the car, we go over our Davenport records and we write to the party who unloaded the car attempting to find out where the difference in weight comes in. Where there is a loss and the car shows a defect or the seal record is not clear, we, of course, have grounds for a claim, but where nothing seems to show up wrong with the car or the seal record we vigorously check into the matter in an attempt to find out where the difference comes in and if the trouble is located take steps to prevent a repetition of the occurrence, whatever it might be.

We merchandise about 90 per cent of our grain on Davenport terms of affidavit country weights, and a large amount of this grain goes to the South and Southwest. About two years ago we shipped a car of oats direct from one of our country stations to an interior point in the Southwest, the trade having been handled through a broker who had handled a volume of our business that year, and this car weighed out 6,150 pounds short of our sworn weights. The buyer instead of taking this up with us direct wrote to the broker who replied that he had handled over 1,500,000 bushels of our grain that year, and this was the only complaint on weights he had and that he felt they had made a mistake in arriving at their unloading weight. He made his letter very emphatic, and on the face of it, we were rather of the opinion that they had missed a couple of wagonloads of grain when unloading the car, but we did check the matter up just the same and found that just about the time this car was shipped to the Southwest this same station shipped two cars to Davenport and all three cars were of approximately the same size and all had just about the same shortage. We gave this information to our auditor and received a report from him that read in part "I find on checking over the shortages on Smith's cars rather a funny thing to account for them. Smith's boy was playing on the manlift about the time these cars were loaded and needing something to balance the counter weight he took a 20-pound weight out of the weight box of our automatic scale, so to arrive at the correct loading weight of these three cars we will have to deduct 20 pounds per hopper which you will note figures out very close to destination weight." We, of course, made good to the Southwest party.

About this same time we shipped a car of corn to a terminal market on consignment, the car being diverted at Davenport to this market, and when we divert a car in transit we always secure railroad weight if the car has been weighed in transit by the railroad company. It so happened that this car had been weighed, so we had a double check on the weights. When returns were received, we found that car to be short 20,000 pounds with nothing to account for the shortage in any way, clear seal record, no leaks and the weighing department of that market were absolutely positive that there was no mistake in their weighing. We took this up with the commission house who had sold the car and made it very plain to them that we would not accept such weights as this and that somebody would have to pay for that shortage. We also furnished them with a detailed statement of our loading weights together with the railroad weight which verified our loading weight, and in a very few days we received a check from them in full payment of this shortage. I was anxious to get to the bottom of this and find out why they

had made such a quick settlement, and found that a further investigation at the unloading elevator revealed the fact that the car unloaded ahead of our car, on which the commission house were able to obtain the country loading weight, showed up with about the same overrun as our car showed short. Inasmuch as the hopper scales were used it looked reasonable that there was a mix up on signals at the elevator and part of our car elevated and credited to the other car. Returns had already been sent out on the other car and I have never heard whether the other shipper was asked to make refund or not.

If you gentlemen were to ask me for any suggestions for the betterment of your supervision, I would say that it would be in giving more consideration to complaints regarding shortages, as generally speaking where a shipper makes a complaint I believe it is a just one and merits consideration. If possible a more thorough investigation should be made and any irregularity whatever should be noted so as to give the shipper grounds for claim where claim is actually justified. It is a mighty hard matter to collect clear record claims and these very claims cost shippers a considerable sum of money every year. As I have said before, and I again want to mention the fact, good weights together with an honest inspection will do more to favorably advertise your market than anything I know of.

THE GRAIN SITUATION IN GERMANY

The rapid rise in prices of agricultural products in Germany during August and September, has, in the opinion of many observers, greatly weakened the case for the proposed protective tariff on agricultural imports into Germany. During the summer months, agrarian agitation for the re-imposition of the pre-war protective duties was strong, and was based primarily on the claim that the low prices of farm products made it impossible for the German farmer to meet operating expenses and to pay the heavy taxes imposed by the Government.

From June 21 to September 26, however, wheat prices on the Berlin Bourse rose from the equivalent of about 90 cents to \$1.49 a bushel, and rye from 72 cents to \$1.32. Butter which on June 21 sold on the Berlin wholesale market at the equivalent of 30 cents per pound sold for 43 cents on September 25, while hogs rose from about 11 cents a pound to 18 cents. As late as July 8 farmers received the equivalent of 2½ cents a quart for milk, while on September 26 they received 3 2/3 cents.

Thus the German farmer finds himself suddenly in a rather favorable situation in the marketing of such surplus products as he has to sell, and his plea for measures which would still further increase agricultural prices is meeting with vigorous opposition in the cities. In fact, the Food Ministry has lately been severely criticized for permitting the exportation of grain during the spring and early summer. At that time, grain prices in Germany were below the world level and grain could be exported to advantage. Now, however, with a short crop, Germany is obliged to import large quantities of American rye at prices almost double those which prevailed at the time export licenses were granted.

While the German farmer has received some temporary relief from the shift in the price level, he is far from being on a sound financial basis. In a report made to the Department of Agriculture by H. C. Kuthe, a special correspondent recently returned from Germany, the prospects of the German farmer are shown to be far from bright.

During the war and during the inflation period following the war, German farmers received prices far above the pre-war level, not only in actual currency, but in actual purchasing power. This period of prosperity lasted for eight years, during which time the farm populations raised their standards of living, invested heavily in machinery, and aided by currency depreciation paid off practically all their mortgage indebtedness.

A year ago this period of paper prosperity came to a sudden end. The currency was stabilized by the

*An address by Bert Dow, president of the Davenport Elevator Company, Davenport, Iowa, at the convention of the Terminal Grain Weighmasters National Association, in Cincinnati, Ohio, September 22, 1924.

introduction of the "rentenmark" secured by a mortgage on all German industries. About half the total amount or about 1,600,000,000 gold marks was allotted to agriculture, thus imposing automatically a new mortgage on every farm in Germany. Taxes were also greatly increased and at the same time agricultural prices dropped in their relation to the general price level. To add to the difficulty, 1924 proved to be a bad year for German crops. Much grain was winter-killed, and unfavorable weather during the spring and summer decreased the yield of all crops to below that of 1923. These calamities resulted in a desperate need for credit which could only be had at almost unheard of rates of interest. A part of the needed credit was advanced by the new rentenbank at an official rate of 10 per cent, which was increased by distributing agencies until the rate to the farmer was about 20 per cent. This was the cheapest credit available. Private banks and individuals charged from 30 to 70 per cent and in some cases as high as 100 per cent. The liquid capital of Germany had been so exhausted by the war and the collapse of the mark, that sufficient money was not available at any price.

Thus, when the German farmer faces the repayment of these short-time loans, together with the payment of his taxes and the principal and interest of the rentenmark mortgage, even favorable prices for his short crops do not give him a very cheerful outlook for the future.

If, however, in accordance with the provision of the Dawes Plan, Germany concentrates its energies more and more on industrial development, and does not re-impose protective duties for the encouragement of agriculture, then Germany may become more dependent than in the past on foreign food supplies. This would result in a steady growth, not only in the market for cotton, tobacco, fruits and specialties, but for American wheat and flour, and American pork and lard, subject, however, to the competition of other surplus producing countries, such as Russia, Argentina, and Canada.

EXPORT TRADE IN GRAIN*

Another factor that makes trouble for the hedger is the fluctuation in futures prices that is brought about by technical (speculative) conditions in the contract markets. For instance, an oversold option may react sharply when the shorts cover; or, conversely, weakly margined holdings thrown on the market by discouraged longs may cause a break in futures without cash prices being equally affected. Again, rumor and gossip may stimulate buying or selling of futures without a corresponding effect on cash grain; a shortage of contract wheat in position for delivery when an option is about to expire may lift cash prices at one market more than at another; and deliberate efforts may be made to change the relation of cash prices to an option, as when terminal elevators with the expiring option sold as a hedge for stocks in store make heavy deliveries early in the month in the hope of so depressing cash prices that spot wheat can be bought back at a price sufficiently below a more distant option to afford a carrying charge, or, on the other hand, the elevators may delay buying in their hedges until late in the month of delivery, in the hope that millers or other buyers who have bought the option as a hedge and are afraid of being obliged to take delivery of wheat not suitable for their use will "offer down" the futures price, in order to take off their hedges, until the elevator companies can buy the expiring option and sell again in a later option at a carrying charge. Such conditions as these rather frequently disturb futures prices when large dealers are "spreading" their hedges from one month into another.

Under certain conditions an announcement of a change in rates may affect cash and futures prices differently, or certain rate regulations may have the same result. For example, if a large amount of wheat had been in store at Kansas City so long that the "out billing" had expired, the wheat

would have to be shipped on a higher rate than that applying on wheat covered by "live billing." This wheat would doubtless be hedged, say, in July. As July approached, dealers long the July option would fear they might be forced to take this undesirable wheat on delivery, unless they sold out their July holdings. This would have a depressing effect on the July option that would not necessarily be reflected in cash wheat prices. For these and other reasons, then, cash prices and futures often vary sufficiently in their movements to cause worry and loss to the most careful hedger.

A situation that frequently arises and causes trouble for hedgers is the necessity for "back spreading," a practice that may be briefly described as follows:

It happens at times that an exporter and an elevator operator who have made a trade in cash wheat have not hedged in the same option or in the same market. In either case a practice termed "back spreading" must be resorted to. This may upset the hedger's calculations and cause him a loss, a condition that may be considered another instance of the failure of hedging in practice to produce the results deduced by theory.

An exporter who is long Chicago July makes an elevator company at Duluth a bid for Durum wheat, basing the price on the Chicago July option, which he desires to give up on the purchase of Durum. The elevator company has its Durum hedged in the July Durum option at Duluth. Durum futures are not traded in at Chicago. The elevator company accepts the exporter's bid and takes over (buys) the Chicago July from the exporter. This closes the exporter's hedges but leaves the elevator company short in the Durum option at Duluth and long July at Chicago. To get out (close its hedges) the elevator must sell in Chicago and buy in Duluth. Now suppose, for example, that the Durum option remains stationary but Chicago option declines before he can sell the futures taken over from the exporter. In that case the elevator loses in its Chicago trading and has no offsetting profit in its Duluth trade. This loss may be greater than the profit in the sale of the cash grain. Similarly, the elevator company may get caught by an unfavorable movement in the Duluth option.

On the other hand, if the exporter had agreed to "spread his Chicago hedge into Duluth Durum" in order to have Durum futures to give up to the elevator, the exporter would have assumed the risk involved in the switch. In such a transaction as we have described, it is the party most anxious to trade who makes the spread and assumes the risk. Much the same sort of risks is incurred when in order to make a cash trade the buyer (or seller) must sell in one future month and buy in another.

HEDGING GRAIN AFLOAT

The hedging of grain afloat is a particularly difficult problem—one, in fact, for which no safe solution has been found.

The simplest form of hedging, and that affording the most protection, occurs when a small quantity of wheat is hedged in a market in which contract wheat is limited to one kind, and the grade likely to be delivered can be readily determined. Under present conditions the hedging of a trade involving 10,000 bushels of Durum in the December option at Duluth would be, perhaps, as good an example as any we can cite. As the quantity traded in increases and as the limits of the contract grade expand, and the difference in conditions that may affect the value of cash wheat and the futures price widen, the difficulty of hedging effectively increases. This self-evident fact is mentioned in order to call attention to the peculiar hazard an exporter must assume in carrying a stock of wheat afloat or in a foreign market. In the opinion of experienced exporters there is no method by which a stock of wheat, or other grain, in this position can be hedged effectively.

For example, Soft Winter wheat in store at Chicago may be hedged effectively in Chicago futures because conditions that are likely to arise will normally have a similar effect on the value of the wheat in store and the option. On the other hand, a sale of Chicago futures against a cargo of No. 2

Hard afloat or in store at a foreign port, especially at a time when little Hard Winter wheat is moving to Chicago, may afford virtually no protection. In fact, it can hardly be termed a hedge, because the wheat the exporter is carrying may have its sale value reduced by circumstances that do not bring about anything like a compensating decline in the Chicago option. Any of the following conditions might have this result:

1. A decline in ocean freight subsequent to the shipment of a cargo may reduce its delivered value, through reducing its replacement value, without causing a corresponding decline in Chicago options. A decline in ocean freights would, in fact, tend to advance the Chicago option rather than lower it, in case the world price level remained unchanged, so an exporter with a hedge out against the cargo might be caught both ways.

The opinion has been expressed by men of experience that severe losses have frequently developed in the export trade by reason of exactly the conditions stated.

2. Changes in foreign exchange rates that would reduce the returns from the shipment would not necessarily bring about an equal decline in the Chicago option sold as a hedge. One has but to recall the wild course of exchange since 1920 to realize this hazard.

3. For wheat that has been put afloat, the exporter has only a limited number of possible buyers, while against his hedge sale of futures he has an unlimited number of possible buyers of the option. Hence futures are more subject to advances than wheat afloat.

On this point an experienced exporter has said: "The American exporter must show his hand immediately after his grain goes afloat, by making offers of it to foreign brokers or importers. This tells them that the particular parcel is coming into their market unsold and they can at times gauge accordingly the price they will pay."

4. Wheat in store abroad is subject to the conditions in the local foreign market. These may be conditions that have little or no influence on Chicago futures. Moreover, the consignor is very largely at the mercy of his consignee or agent, who may be more anxious to please his customers than to protect the shipper. The mere fact that wheat is known to be consigned is a factor adverse to its selling price. These conditions depress cargo value without affecting futures.

5. During the last half of the crop season hedges against cargoes are, as a rule, more hazardous than during the first half. American markets are peculiarly likely at this time to go out of alignment with the foreign markets, because the movement of American wheat is relatively light and anxiety respecting the outcome of the oncoming crop is apt to develop.

6. Cargoes of corn or oats are even more hazardous to hedge than wheat for their delivered values are dependent very largely, almost altogether, by conditions in the markets to which they are shipped, while coarse-grain futures are determined mainly by conditions in this country.

7. The value of stocks of grain afloat unsold can also be affected by a decline in the cash price of "premiums" after loading. For instance, an exporter might have to pay a good full premium to secure grain to put on a freight engagement made some time earlier, and after this had been loaded new arrivals at the seaboard or a decline in interior markets might result in a break of a couple of cents a bushel in the premiums for other lots to make quick loading at the seaboard. The value of the parcel afloat unsold would then be affected by free offers for quick shipment abroad at the reduced level of premiums.

(To be continued)

FREE SHIPS' BERTHS AT ST. JOHN

Free grain berths at the port of St. John, New Brunswick, Canada, is a proposal which is receiving strong support. The Port Development Committee, Mayor F. L. Potts, chairman, has had the matter under consideration for several weeks and

*The results of a survey by the Department of Commerce on the methods and possibilities of shipping grain abroad, continued from page 283, October AMERICAN GRAIN TRADE.

it is probable that a recommendation will be presented to the city council soon. It is believed that free grain berths will bring increase in business. Opponents of the scheme say it will mean a decrease of \$26,000 per year in wharf revenue and the burden shifted to the tax payers.

Commissioner Bullock, head of the harbor department, favors free berths for vessels taking full cargoes, on the ground that few full grain cargoes are taken from St. John and that a concession for that class of ship might attract more tramp steamers.

CANADIAN FUTURE PREDICTED

Canada will raise enough wheat to feed a billion people within 50 years, according to Sir Henry Thornton, president of the Canadian National Railways, who has completed a tour of the Western provinces investigating agricultural conditions.

"With Canada lies the solution of the world's future food supply," said Sir Henry. "If only 50 per cent of the Peace River district of Alberta were brought under cultivation, more wheat would be produced than is raised at present by the entire Dominion. This area abounds in what the nations of the world want—poultry, cattle, sheep and grain. Its only lack is settlers. It is a vast empire with almost limitless possibilities of future production.

"The day will soon come, I believe, when the people of the United States will depend largely on Canada for means of sustenance. Population is the only factor now lacking in the Dominion. Canada in the future can easily support a population of 200,000,000 people. Of the 300,000,000 acres of land suitable to agriculture in Canada, only one-half is in farm holdings, one-quarter is cultivated and 225,000,000 acres await the settler's plow."

PRIMITIVE GRAIN STORAGE AND MILLING

Africa is the last continent in which barbarism still persists among populous tribes as yet untouched or only slightly affected by contact with



BUILDING GRANARIES IN CAMEROON

people of a higher civilization. In what was formerly part of German West Africa are the Cameroons, a name applied indiscriminately to a local mountain range, a river, the land itself and the people. They occupy a territory larger than the area of Illinois, Indiana, Ohio and Kentucky combined. The country is now, since the war, a French possession with some millions of people, who, while negroes, often lack distinct negroid features.

As in most barbarous lands, we find the past of the whole human race surviving in the present;

for their industries are in state of development through which our own passed hundreds and maybe thousands of years ago. In milling, for instance, we find them still in the pestle and mortar stage. It will be seen from the illustrations that this ineffective method of preparing cereals for food employs women to do the hard work; for practically everywhere in primitive societies, women are the millers as well as the bakers. Three of them to one mortar, however, seems to be a plentiful supply of labor.

Rather more interesting than the milling apparatus, are the granaries seen in the other two illustrations. One of them shows the granaries in course of construction. They are constructed of mud or adobe and look like enormous jugs when



MILLING IN WEST AFRICA

completed. In such a tropical region as West Africa it is necessary to protect cereal supplies from attacks of ants and insects as well as from dampness and consequent heating and decay. This oversized adobe bottle seems to be quite effective; certainly it is a great advance over some of the makeshift devices of many tribes. The thatching shown in one of the illustrations is evidently intended to protect the granary, especially the "plug" from torrential rains which would not only spoil the grain but might disintegrate the mud structure. Japanese farmers often use a somewhat similar thatch of rice straw as umbrellas to shed the rain from their persons.

So far as we know, neither wheat nor rye is grown in this region. Maize is becoming quite common over large parts of Africa. There are a number of millets and sorghums indigenous to Africa. The "elevator man" in the cut is evidently holding one or more heads of kafir corn in his hands. Bread as we understand the term is practically unknown among the tribesmen of Africa, except as introduced by the whites. Ship's bread or crackers, however, has become quite an article of commerce in West Africa. The meals made from the millets or the seed of the sorghums is usually made into porridge.

NEW ESTIMATES OF INTERNATIONAL TRADE

Revised estimates of grain crops received in the past six weeks make necessary some important changes in the tables of estimated exports and imports published in "Foreign Crops and Markets" on September 24, 1924.

This revision still leaves the maximum estimate of total exports below the estimates of Broomhall and Sir James Wilson, and below the estimate recently released by the International Institute of Agriculture at Rome. The estimate of the Institute for the United States, Canada, and British India agrees with Broomhall's estimates made some time ago, and for the United States and India appears to be higher than would be justified by present crops and past records of exports. It may be, however, that in estimating exports of 244,000,000 bushels from the United States, the Institute is considering gross exports, whereas the figures in the following statement represent exports less imports. Another difference between the estimate of the Department of Agriculture and those of Broomhall and the Institute is that the Department does not look for Southern Hemisphere exports in excess of those

of the year just closed, whereas the European estimates appear to expect exports from Australia and Argentina from 40,000,000 to 60,000,000 bushels greater than last year.

The estimate of the crop in the United States has been raised by 20,000,000 bushels, and if the heavy rate of export maintained during August and September is continued it will carry the net export figure over 200,000,000 bushels. The estimate of the Canadian crop has not been changed officially, but unofficial reports indicate a production greater rather than less in the last Government report. No change has been made in the estimates of exports from the Southern Hemisphere and India, but there is a slight revision upward in exports from other countries.

SHANGHAI MARKET FOR WHEAT POOR

Mill stocks of wheat in Shanghai, which is the principal milling center of South China, were estimated on September 15 to be about 2,200,000 bushels, an amount sufficient to keep the mills running for two months or up to mid-November. Grain dealers were said to be holding additional 1,760,000 bushels. Military operations have interrupted the flow of Chinese wheat into Shanghai, and are preventing the mills from selling much flour outside the city, according to G. C. Howard, American trade commissioner.

The outlook for foreign wheat is dull in Shanghai owing to the low prices on native grains which have prevailed since the beginning of military operations. The tightness of money and the prospect of further military difficulties in the north have reduced shipments and piled up stocks.

BARLEY AND OATS WORLD MARKETS

The principal barley importing countries are generally Germany, the United Kingdom, the Netherlands and Belgium. Germany, however, which imported more than 50 per cent of the supply entering into world trade in the five years before the war,



COMPLETED GRANARY WITH PROTECTIVE THATCH

now takes less than 20 per cent, the United Kingdom being the present leading importer of barley.

Nine different countries participated in the export trade in barley to the extent of 5 per cent of their total supply in the year ending June 30, 1924, and with Roumania, the leading exporting country, furnishing less than 17 per cent. Before the war, Russia exported an average of 173,000,000 bushels of barley, or approximately 62 per cent of all the barley entering into the world trade. In 1923-24 Russia again became a competitor in barley markets with exports estimated at a little less than 20,000,000 bushels, or nearly as much as from Roumania. Other exporting countries, in the order of

their importance, last year were Canada, British India and the United States.

According to Government reports, the situation in the world market for oats is similar to that for barley, except that in 1923-24 Argentina and Canada together furnished 63 per cent of the oats reported as entering into world trade, the United States taking third place with exports amounting to 8 per cent of the total. In pre-war years Russia was usually the leading exporter of oats, furnishing about 30 per cent of the total supply. While the United Kingdom has been for many years the leading market for oats, usually taking about one-third of the supply, the amount imported has declined to about one-half the average imports in the five years just preceding the war.

MARKTON OATS IMMUNE FROM SMUT

The first variety of oats with high yielding ability and fairly satisfactory kernel characters which has been found to show complete immunity from covered smut is the Markton variety, according to the United States Department of Agriculture. It has been the highest yielding variety at Moro, Oregon, during the 10-year period from 1914 to 1923 inclusive, and at Pullman, Wash., in the four and five-year periods in which it was included in the tests.

Circular 324, recently issued by the Department, describes the development of the new variety, and the opinion is given that if for any reason Markton does not prove superior for commercial purposes, it still should be a valuable variety for hybridizing with other varieties of common oats. If by this process smut-immune strains of important commercial varieties, such as Silvermine, Swedish Select, Kherson and Green Russian, can be developed, substantial progress will have been made in reducing the loss caused oats crops by smut.

HOME OF HARD WINTER WHEAT

While the aggregate production of Hard Winter wheat is large in this country, the territory in which it is raised is relatively small, especially where it is raised to the exclusion of other kinds. The distinctively and exclusively Hard Winter wheat territory embraces all of Kansas, except the southeastern corner; all of southern Nebraska; and eastern Colorado; northern and western Oklahoma and a part of northern Texas, bordering in Oklahoma. There is also a limited territory in Oregon, on its northern border, where Hard Winter wheat is exclusively raised.

But there is other territory where Hard Winter wheat is raised to some extent. One belt starts at the eastern boundary of Kansas and Nebraska and extends through northwestern Missouri, most of southern Iowa and the adjoining territory in Illinois. There is a narrow Hard Winter wheat belt in Minnesota, starting from the southeastern part of the state and extending diagonally across the state to the Red River. Wyoming has a Hard wheat region in the northeastern corner; so has New Mexico. There is a long belt extending from central Montana through Idaho and into northern Utah where Hard Winter wheat is raised to some extent. Finally, eastern Washington produces some Hard Winter wheat which makes that state a producer of all three classes of wheat.

MICHIKOFF WHEAT

Quite a little discussion has been going on in Indiana as to the merits of Michikoff wheat. This new variety was developed by Purdue University Agricultural Experiment Station in answer to the demand for a flour that would meet the demands of bakers. It is a Hard Red wheat, rich in protein, and last year the average of a large number of samples showed this variety to contain 13.63 per cent protein. A large acreage was planted last fall, and the experiment station authorities say that they feel it has established

itself as an unusually high class variety, but they do not advise farmers to grow this wheat unless they have assurance of a market at a fair price.

But there seems to be some difference of opinion as to the desirability of this new variety. It is said that members of the farmers' wheat pool in one locality have been told by the manager of the pool that Michikoff is worth 10 cents per bushel more than ordinary wheat and that one milling concern is paying that amount. A grain dealer who was asked to make a price on the wheat sent samples to a dozen mills, and all of them stated that the sample was Hard wheat and would be handled only at a discount under Soft Red. A big milling concern stated that the wheat tested 11.4 per cent protein and would sell at a discount under No. 2 Red. This mill grinds Hard wheat. The dealer thought that millers should not indorse Michikoff, as that would cause farmers to sow the variety, with the result that dealers and millers would have mixed Hard and Soft wheat to handle. The question is whether it is wise to raise Hard wheat in Soft wheat territory, or Soft wheat in Hard wheat territory.

PNEUMATIC METAL SEPARATOR

R. W. Noddins, engineer of the Mutual Fire Prevention Bureau, sent in the accompanying sketch, made by R. M. Maitland from designs of a machine

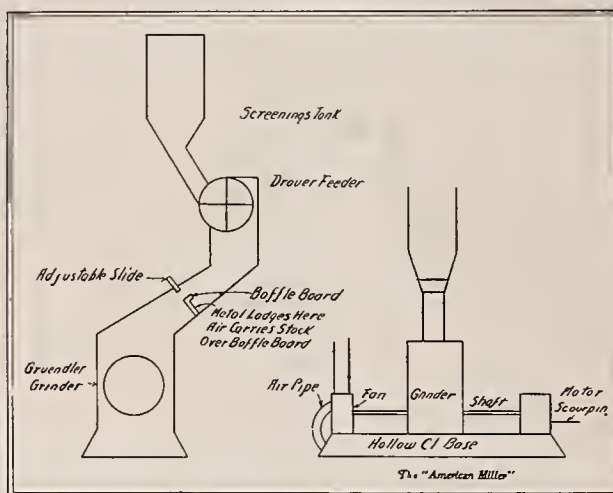


DIAGRAM OF PNEUMATIC METAL SEPARATOR

invented by E. C. Parrott, superintendent of the Hanover Star Milling Company located at Germantown, Ill.

The stock from the screenings tank is fed to grinder by a Draver Feeder at the rate of 100 pounds per hour. The current of air through the opening in spout is strong enough to carry the stock over the baffle board as shown in drawing. Anything heavier lodges ahead of the baffle board. (See notation on drawing.)

This method also prevents a choke in the grinder when power is shut off. The stock will fall on the floor through the opening in spout as there is not enough air current when fan is idle to draw it over the baffle board. The hollow cast iron base on which the fan, grinder and motor are located, was made especially for this job.

INSTITUTE OF AGRICULTURE BENEFITS NATIONS

The International Institute of Agriculture at Rome, in which 71 countries now have membership, has been an important factor since 1905 in promoting international agriculture through the exchange of current crop and live stock statistics. The institute reports on 70 per cent of the world wheat, exclusive of Russia. It collects data only and does no research at the present time. While this country sends delegates to the annual conferences, it has no American scientists on the permanent committee of 20, due largely to the insufficient salary scale customary in Europe.

Asher Hobson, American delegate to the institute, has just returned. He has called attention

to the opportunities afforded for making valuable contacts with other nations, and for approaching sources of information on agricultural industries of various countries without any question of commercial bias, which is not the case when individuals representing an agricultural business here seek facts from their competitors in Europe or elsewhere.

TRADE NOTES

John S. Metcalf Company of Chicago, Ill., are consulting and supervising engineers for a new annex to the J. R. Hale & Sons' elevator at Nashville, Tenn. There will also be some improvements made on the old elevator.

W. R. Leathers, who recently became the manager of the Chicago office of Sprout, Waldron & Co. of Muncy, Pa., reports a gradual improvement in business this fall with good inquiries for the well-known Monarch Attrition Mills, crushers and mixers in central and northern territory. The demand has been particularly good for Monarch Mixers to go in dairy feed plants.

The Huntley Manufacturing Company of Silver Creek, N. Y., announces that they have secured the services of Frank J. Murphy, who has represented other lines of grain cleaners in the Southwest for many years. He will be in that field representing "Monitor" machines and will at all times take pleasure in presenting their good points to prospective buyers. Mr. Murphy has his headquarters in Room 214 Postal Telegraph Building, Kansas City, Mo.

Among their general literature the Weller Manufacturing Company of 1820-1856 North Kostner Avenue, Chicago, Ill., has a descriptive pamphlet on the Clark Power Shovel for handling grain, coal, ore, cement, sand, gravel, phosphate, fertilizer, etc. It is a standard machine for handling grain, and the shovel is usually used in pairs, both being placed on the same shaft. Two men with a pair of shovels and a double outfit can unload a car of grain in about 20 minutes; one man with a single shovel can usually handle a car in 40 minutes.

There will be shown in various parts of the United States this winter, if present plans are carried out, a moving picture of the operations of the large grain elevator at Canton, Baltimore, Md., which James Stewart & Co. built for the Pennsylvania Railroad Company. Besides being interesting, this screen picture will have unusual educational value. Grain will be shown in process of unloading from cars and loading into boats. There will also be shown views of the harbor and many interesting facts relative to the handling of grain at seaboard points.

A corporation to be known as the American & Continental Corporation with an initial subscribed capital of \$10,000,000 has been organized by a group of financial interests under the auspices of the International Acceptance Bank, Inc., and Kuhn, Loeb & Co., with Dillon, Read & Company and their associates with headquarters in New York. The purpose of this corporation is to make American capital available for the financing of industrial enterprises in Europe. The first Board of Directors will consist of the following. Paul M. Warburg—chairman, International Acceptance Bank, Inc.; Paul D. Cravath—Cravath, Henderson & DeGersdorff; Clarence Dillon—Dillon, Read & Company; Marshall Field—Marshall Field, Gore, Ward & Co.; George Murnane—vice-president, The New York Trust Co.; James H. Perkins—president, The Farmers' Loan & Trust Co.; Mortimer L. Schiff—Kuhn, Loeb & Co.; Harrison Williams; Edward G. Wilmer—chairman, The Goodyear Tire & Rubber Co. The formation of this company coming simultaneously with the issue of the German loan is a matter of great interest as showing that American capital has for some time been prepared to interest itself in the German situation and has only been awaiting the flotation of the loan before proceeding with definite plans.

ASSOCIATIONS

FALL MEETING OF OHIO GRAIN DEALERS

The fall meeting of the Ohio Grain Dealers Association will be held November 18, at the Chittenden Hotel, Columbus, Ohio. There will be a fellowship luncheon in the ball room at noon, and Dr. D. F. Rittenhouse of Columbus, will be the speaker. Secretary McCord has requested that those who will be present communicate with his office in advance if possible.

It may be mentioned incidentally that President S. L. Rice and the secretary have just concluded the holding of six local meetings, which were attended by a total of more than 300 members of the grain trade. It is the hope of the officers that as many as possible will arrange to be present at the fall meeting in Columbus.

FEED CONTROL OFFICIALS HOLD ANNUAL MEETING

On October 23 the sixteenth annual meeting of the Association of Feed Control Officials was held in Washington, D. C. Control departments of 22 states, as well as the Federal Government and Canada, were represented in the conferences. The report of the Executive Committee covered an assortment of subjects which had been referred to them at the preceding annual meeting.

They found that Corn Red Dog flour did not correspond in the milling process or chemical composition or in any way to Wheat Red Dog, and that such a term was misleading. It was recommended that the tentative definition for dried buttermilk feed remain tentative for another year, for further study. In order to promote uniformity of registration and labeling of feeds containing minerals, except the poultry scratch feeds containing grit and shell, the committee recommended:

(a) That mixed feed containing both feed and mineral ingredients requires in addition to the usual declaration of the chemical feed analysis a declaration of each ingredient contained therein and the minimum percentages of the lime (CaO), phosphoric acid (P₂O₅), iodine (I) and salt (NaCl) if same are added.

(b) That mineral feeds containing no organic ingredient do not require the usual chemical feed guarantee but do require a declaration of each ingredient contained therein and the minimum percentages of lime (CaO), phosphoric acid (P₂O₅), iodine (I) and salt (NaCl) if same are present.

(c) That the mineral ingredients be stated in the common English terms, if any such terms exist.

(d) It being impossible to classify separately the drug ingredients and mineral ingredients, be it resolved:

(1) That all feeds containing mineral ingredients generally regarded as dietary factors essential for the normal nutrition of animals and which are sold or represented for the purpose of supplying these minerals as correctives to rations in which these same mineral factors may be deficient, be classified as mineral feeds.

(2) That all other preparations which are sold or represented for the cure, mitigation or prevention of disease shall be classified by this association as drugs or medicines.

The Executive Committee suggests that this report be accepted and referred to the Uniform Labels committee for further study, and, further, that it be printed in the printed pamphlet with the definitions of the association, for the information of interested persons.

It was recommended that the tentative standard for brown shorts be changed from 6.5 per cent maximum fiber to 7.5 per cent maximum fiber and that it remain tentative for another year. The present tentative standards for gray shorts, white shorts, wheat mixed feed and Hard wheat mixed feed were adopted as official. A modification was carried in regard to gray shorts—standard to remain tentative for another year pending further investigation. Present tentative definitions of Ivory Nut Meal and Wheat Red Dog were recommended adopted as permanent.

The following tentative definitions of rye products were adopted:

Rye bran is the coarse outer covering of the rye kernel as separated from the cleaned and scoured rye.

Rye feed, a by-product obtained in the usual process of the milling of rye flour from cleaned and scoured grain, consists principally of the mill run of the outer covering of the rye grain and the germ, with small quantities of flour and aleuron.

Rye red dog, a by-product obtained in the usual process of the milling of rye flour, consists principally of aleuron with small quantities of flour and fine bran particles and shall not contain more than 3.5 per cent fiber.

Rye low grade feed flour consists principally of dark rye flour and small quantities of aleuron and fine bran particles and shall not contain more than 15 per cent crude fiber.

Rye middlings consists of the rye feed and rye red dog combined in the proportions obtained in the usual process of milling rye flour.

Rye flour middlings consists of the rye feed, rye red dog and pure dark rye flour combined in the proportions obtained in the milling of rye flour and shall not contain more than 5 per cent crude fiber.

In his annual address, President Halvorson said in part:

Before starting this review and before making any recommendations for future work I wish to say a word about the cordial relations that exist between this Association and the American Feed Manufacturers Association, the Millers National Federation and the United States Feed Distributors Association. The officers of these three trade organizations have shown such a spirit of co-operation and willingness to assist in the work of the Association that I feel compelled to call it to your attention at this time. In the work of our Committee on Uniform Labels and Registrations the trade representatives have lent such active assistance as to make the Association members feel that the program could not have been successful without their aid.

As will be shown when the Executive Committee makes its report tomorrow various committees have been at work on the problems that have come up for consideration. I do not intend nor do I think it advisable for me to attempt to say anything about the work of more than one or two of our committees. I do wish, however, to call to your attention our new committee on mineral mixture feeds which was appointed early in the summer with Mr. Proulx of In-



E. W. ELMORE

diana as chairman. This committee was appointed for the purpose of making a complete survey of the subject of mineral feeds and to recommend to this Association the attitude which we should take with respect to minerals.

In some parts of the United States this has become a serious problem in feed law enforcement. The easier way of course would be to side step this issue and say that such products were not feeds in the commonly accepted meaning of the word. To do this, I think, would not only be to neglect our duty to the purchasers of products used for feeding live stock but would also be to disregard an opportunity to extend our usefulness for the public good.

Not far removed from the subject of mineral mixtures is a matter that has been before the feed control officials in many states for a long time. This is the problem of properly regulating the sales of stock and poultry conditioners and condimental feeds. A few of the states have special laws governing the sales of these products but even in such cases officials charged with the enforcement of them testify to the great difficulties encountered. Many of us are compelled to do what we can to control the distribution of these products under the ordinary feed laws which, we must admit, are far from adequate for the purpose. Anyone familiar with the methods used by many of the companies marketing stock conditioners will see the necessity for more stringent laws to regulate the distribution of their output and to curb the activities of their agents, representatives and salesmen.

Whether or not the special laws covering condimental feeds and stock conditioners have proved satisfactory in the states where passed I am not prepared to say. It is my understanding that most of these laws are satisfactory so far as the regulation of the product itself is concerned but that they are not adequate to put a stop to the unlawful and unscrupulous methods used by the salesmen in the field.

I have heard that one state has met this condition by licensing stock conditioner salesmen. The license fee, as I recall it, is very high and can be revoked by the official issuing it. Severe penalties are also provided for violation of the law and for selling any of the products mentioned without first obtaining a license. I should like to see a thorough discussion of this subject and would recommend that this Association co-operate with the sectional associations of the Dairy, Food and Drug Officials which have already made a start on the drafting of a satisfactory and uniform law for condimental feeds and stock condi-

tioners. This is, I feel certain, another field in which we should and can extend our usefulness.

The address by R. W. Chapin of Chapin & Co., will be printed elsewhere in this issue. Other addresses were made by Professor Savage and Dr. Strowd.

President E. W. Elmore of the American Feed Manufacturers Association next spoke, and said in part:

There is another situation we would like to forcibly bring to your attention. Some of the states are already having annual conferences with feed dealers and we wish it were a practice in every state. Every community uses feeds, there are but few exceptions, and the merchant selling feeds is as necessary to the proper development of his community as the grocer, druggist, or any other merchant to whom the customer can go and have his immediate wants supplied. It is as impracticable to try to serve a community with feeds exclusively from the car to the exclusion of the feed merchant as it would be to deliver groceries in the same manner to the exclusion of the grocer. We all know what would happen.

Some one would go hungry or else they would complain to the cook that they wanted something besides potatoes and bread and the cook would reply that there was nothing else until the next car arrived, that they did not order it quite as soon as they should and it had been delayed in shipment or transit. We want to remember that Mrs. Cow under similar conditions would have similar complaints and rightly so, for, as you tell us, a proper variety is necessary to a well balanced ration. There must be a feed store which must carry in stock the variety of feeds demanded in the community and which serves the customer with good reliable feeds at a reasonable price, which can not be done if it is called upon to supply the customer only in cases of emergency.

Permit the dealer to conduct his business to the best advantage to his community and when his community is well served he will be successful in like proportion. Nothing can help the dealer more than the conferences such as are being held in some states. Encourage them to organize or join a feed dealers' association, urge them to attend their meetings, promote discussion of their difficulties and in most cases they will learn that their troubles are not so bad as they appeared before discussion. A little serious thought and discussion is usually sufficient to solve their problems. One of the best channels of distribution of your knowledge of feeds and feeding is through the feed dealer who is constantly in personal touch with the feeder and who will gladly receive your instructions and act accordingly, as we do. Help him to become more proficient in determining relative feeding values that he may recommend to his customers the feeds which may be used most profitably; that extended credits are ruinous to all involved, and many other facts that can be presented at these conferences. With this knowledge he too will learn that his success depends upon the prosperity of his customer.

The officers elected for the coming year in the Association of Feed Control Officials are: President, G. L. Bidwell, Washington, D. C.; vice-president, W. H. Strowd, Madison, Wis.; secretary-treasurer, A. W. Clark, Geneva, N. Y.; and Executive Committee: H. H. Hanson, H. A. Halvorson, A. W. Clark, J. W. Sample and Dr. J. K. Haywood.

VERMONT GRAIN DEALERS MEET

A meeting was held October 27 at the Hotel Van Ness, Burlington, Vt., at which 82 attended, for the purpose of discussing future plans and to listen to suggestions from state officials. Among the resolutions adopted was a recommendation to convert as much of the grain business as possible from credit to cash, to make a difference of 10 per cent per hundredweight between credit and cash, to charge extra for deliveries, and to charge 6 per cent interest on all accounts after 30 days after date of invoice.

A number of interesting addresses were made by such persons as Commissioner of Agriculture E. H. Jones, secretary H. L. Ford of the Burlington Chamber of Commerce, and various others of similar prominence.

Remarks were made by Charles M. Cox, president of the St. Albans Grain Company, in which he especially called the attention of the grain dealers to the fact that the time is now opportune for reform in the grain business and for reduction in the amount trusted out. "If we grain dealers had gotten together six or eight years ago and planned a campaign to shut off credit by charging extra for same and also charging a higher price for delivery the cry would have gone out that we were combining together to place a burden on the farmers; whereas, now here we are at invitation of farmers themselves who are urging us to adopt such plans," he said.

The secretary of the organization was urged to notify all members of current events which might be of special interest to them, and the meeting adjourned with the understanding that the next meeting would be held in June, 1925.

The officers and Executive Committee are as follows: President, Dan M. Johnson, Essex Junction; vice-president, A. W. Braisted, Bennington; secretary, C. F. Dowe, St. Albans; treasurer, C. H. Stearns, Johnson; county representatives, A. W. Norton, Vergennes; E. J. Fowler, Manchester Depot; W. A. Church, Richmond; William Ide, St. Johnsbury; H. E. Currier, Concord; L. L. Marsh, Enosburg Falls; E. J. Parker, Grand Isle; A. H. Slayton, Morrisville; E. H. Mason, Randolph; F. R. Sherman, Newport; G. N. E. Burditt, Rutland; F. M. Kempton, Barre; Godfrey Crosby, Brattleboro; Norman Williams, Woodstock.

THE AMERICAN ELEVATOR AND GRAIN TRADE

Forty-Third Year

"MORE AND BETTER WHEAT"

"There is no other area that is more famous for its Winter wheat than the Southwest," says H. M. Bainer, Director of the Southwestern Wheat Improvement Association. Continuing he says, "This is a natural wheat country and its reputation for high quality wheat has been established. Wheat has been and must continue to be the leading crop. But in order to continue to get satisfactory profits from wheat, it is absolutely necessary to change the farming system so that higher yields per acre are assured.

"On account of the continuous growing of wheat year after year on much of this land, there is a natural tendency towards lower yields and poorer quality, all of which is due to declining soil fertility. Every bushel of wheat and every ton of straw, or any other grain or forage crop, removed from the land without provision for returning the fertility represented in them, means just that much loss to the soil. It is an alarming condition, when we stop to consider that fully one-third of the original nitrogen and organic matter of our best wheat lands has already been lost. There is no wonder that the average yield of wheat per acre often does not pay the cost of production. While it is true that the cost of growing wheat is high and the selling price is low, yet when we stop to consider our wheat growing in competition with Canada, Argentina and other wheat growing countries, our prospects for higher prices do not look encouraging.

"Wheat farming is going to be less and less profitable under the old system which is now in use. A better system is necessary and when this has been adopted, the wheat farmer will have for his motto—'Less land to wheat, more wheat per acre, better quality and higher profits'—and this must come through diversified farming, better tillage methods, better seed, rotation of crops, more legumes and more livestock."

RECEIPTS AND SHIPMENTS

Following are the receipts and shipments of grain, etc., at the leading terminal markets in the United States for October:

BALTIMORE—Reported by Jas. B. Hessong, secretary of the Chamber of Commerce:

Receipts		Shipments	
1924	1923	1924	1923
Wheat, bus..	1,499,138	2,010,484	1,765,011
Corn, bus....	76,294	16,322	24,915
Oats, bus....	242,166	77,911	222,865
Barley, bus..	1,461,400	161,554	1,345,404
Rye, bus....	1,590,963	62,024	547,925
Malt, bus....	17,895	13,306	1,941
Buckwheat, bus.....	3,095	.....	.....
Millfeed, tons	1,462	1,804	.....
Straw, tons..	35	71	.....
Hay, tons....	1,020	2,690	.....
Flour, bbls..	322,629	204,342	154,201

CAIRO—Reported by M. C. Culp, chief grain inspector and weighmaster of the Board of Trade:

Receipts		Shipments	
1924	1923	1924	1923
Wheat, bus..	339,350	2,290	440,332
Corn, bus....	60,334	19,482	12,852
Oats, bus....	1,278,723	1,576,813	1,074,550

CHICAGO—Reported by J. J. Fones, secretary of the Board of Trade:

Receipts		Shipments	
1924	1923	1924	1923
Wheat, bus..	8,102,000	2,774,000	10,931,000
Corn, bus....	9,276,000	7,293,000	5,195,000
Oats, bus....	11,904,000	7,660,000	4,954,000
Barley, bus..	2,070,000	1,255,000	646,000
Rye, bus....	1,135,000	127,000	1,415,000
Timothy Seed, lbs.....	4,845,000	4,419,000	4,924,000
Clover Seed, lbs.....	888,000	1,681,000	339,000
Other Grass Seeds, lbs..	2,855,000	2,729,000	1,748,000
Flax Seed, bus.....	458,000	106,000	4,000
Hay, tons....	14,905	14,668	1,233
Flour, bbls..	1,227,000	953,000	863,000

CINCINNATI—Reported by D. J. Schuh, executive secretary of the Cincinnati Grain & Hay Exchange:

Receipts		Shipments	
1924	1923	1924	1923
Wheat, bus..	555,800	684,000	348,600
Corn, bus....	508,200	264,000	253,400
Oats, bus....	406,000	524,000	186,000
Barley, bus..	7,000	13,000	.....
Rye, bus....	23,800	38,400	18,200
Kaffir Corn, bus.....	1,400	.....	.....
Hay, tons....	8,702	5,093	.....
Feed, tons..	2,700	1,500	.....

CLEVELAND—Reported by F. H. Baer, traffic commissioner of the Chamber of Commerce:

Receipts		Shipments	
1924	1923	1924	1923
Wheat, bus..	185,653	93,337	2,543
Corn, bus....	81,437	87,440	13,178
Oats, bus....	461,967	372,058	62,206
Barley, bus..	15,055	16,384	.....
Rye, bus....	2,951	986	1,104
Hay, tons....	2,033	2,580	.....

DENVER—Reported by C. B. Rader, secretary of the Grain Exchange:

Receipts		Shipments	
1924	1923	1924	1923
Wheat, bus..	1,028,500	807,500	51,000
Corn, bus....	394,200	331,200	145,800
Oats, bus....	190,000	150,000	68,000
Barley, bus..	461,700	131,100	28,500
Rye, bus....	18,700	3,400	6,800
Hay, tons....	1,280	1,270	.....

DETROIT—Reported by C. B. Drouillard, secretary of the Board of Trade:

Receipts		Shipments	
1924	1923	1924	1923
Wheat, bus..	174,000	.....	6,000
Corn, bus....	47,000	.....	9,000
Oats, bus....	156,000	.....	24,000
Barley, bus..	31,000	.....	.....
Rye, bus....	67,000	.....	3,000

DULUTH—Reported by Chas. F. MacDonald, secretary of the Board of Trade:

Receipts		Shipments	
1924	1923	1924	1923
Wheat, bus..	33,136,153	5,063,184	29,538,996
Corn, bus....	121,093	4,156	60,000
Oats, bus....	2,964,585	443,398	2,978,696
Barley, bus..	3,772,390	749,592	4,180,666
Rye, bus....	12,409,200	1,679,298	11,431,828
Flax Seed, bus.....	6,177,901	2,453,883	4,553,917
Flour, bbls..	734,745	965,660	881,335

FORT WILLIAM, ONT.—Reported by E. A. Ursell, statistician of the Board of Grain Commissioners:

Receipts		Shipments	
1924	1923	1924	1923
Wheat, bus..	40,890,605	67,050,310	29,402,656
Corn, bus....	3,055	7,785	3,055
Oats, bus....	4,815,401	5,436,202	1,486,995
Barley, bus..	8,048,541	2,692,409	5,220,338
Rye, bus....	1,302,226	944,753	1,378,017
Flax Seed, bus.....	954,783	974,243	137,043

INDIANAPOLIS—Reported by Wm. H. Howard, secretary of the Board of Trade:

Receipts		Shipments	
1924	1923	1924	1923
Wheat, bus..	381,000	591,000	184,000
Corn, bus....	1,459,000	923,000	1,071,000
Oats, bus....	842,000	1,210,000	820,000
Rye, bus....	50,000	70,000	24,000
Flour, bbls..	45,527	.....	60,000

KANSAS CITY—Reported by W. R. Scott, secretary of the Board of Trade:

Receipts		Shipments	
1924	1923	1924	1923
Wheat, bus..	10,671,750	6,355,800	7,641,000
Corn, bus....	427,500	715,000	313,750
Oats, bus....	936,700	1,866,600	304,500
Barley, bus..	42,000	232,500	13,000
Rye, bus....	42,900	41,800	114,400
Bran, tons..	9,080	3,300	23,800
Kaffir Corn, bus.....	103,400	17,600	76,000
Hay, tons....	40,704	22,308	13,668
Flour, bbls..	88,725	80,275	667,550

LOS ANGELES—Reported by secretary of the Grain Exchange:

Receipts		Shipments	
1924	1923	1924	1923
Wheat, car-loads	293	352	.....
Corn, carloads	147	129	.....
Oats, carloads	70	90	.....
Barley, car-loads	203	206	.....
Rye, carloads	1	1	.....
Kaffir Corn, carloads ..	0	2	.....
Flour, car-loads	239	236	.....

MILWAUKEE—Reported by H. A. Plumb, secretary of the Chamber of Commerce:

Receipts		Shipments	
1924	1923	1924	1923
Wheat, bus..	1,657,600	267,400	1,668,909
Corn, bus....	742,960	514,720	1,111,292
Oats, bus....	3,300,000	5,073,800	1,416,872
Barley, bus..	1,840,400	1,186,580	700,358
Rye, bus....	887,210	164,200	547,763
Timothy Seed, lbs.....	1,383,300	755,500	204,670
Clover Seed, lbs.....	747,195	304,223	266,040
Malt, bus....	11,400	36,600	295,100
Flax Seed, bus.....	165,775	120,650	4,500
Feed, tons....	2,615	113,400	6,271
Hay, tons....	874	1,764	36
Flour, bbls..	325,380	351,040	47,300

MINNEAPOLIS—Reported by G. W. Maschke, statistician of the Chamber of Commerce:

Receipts		Shipments	
1924	1923	1924	1923
Wheat, bus..	18,382,550	14,741,830	9,923,340
Corn, bus....	435,810	486,520	277,930
Oats, bus....	11,470,170	4,331,320	3,248,160
Barley, bus..	4,155,310	1,879,300	3,387,110
Rye, bus....	2,385,700	1,010,450	2,553,200
Flax Seed, bus.....	3,474,790	1,952,810	1,455,170
Hay, tons....	3,505	2,905	207
Flour, bbls..	69,148	132,887	1,200,199

MONTREAL—Reported by J. Stanley Cook, secretary of the Board of Trade:

Receipts		Shipments	
1924	1923	1924	1923
Wheat, bus..	29,198,965	16,378,248	25,329,418
Corn, bus....	28,730	182,127	1,631
Oats, bus....	2,770,622	1,379,740	2,071,897
Barley, bus..	1,220,995	1,194,263	1,568,371
Rye, bus....	.....	.....	10,354,470
Flax Seed, bus.....	44,159	107,409	.....
Hay, bales....	156,697	89,895	40,835
Flour, bbls..	490,712	591,686	700,150

NEW YORK CITY—Reported by H. Heinzer, statistician of the Produce Exchange:

Receipts		Shipments	
1924	1923	1924	1923
Wheat, bus..	10,554,600	3,510,300	8,891,000
Corn, bus....	955,600	300,000	.....
Oats, bus....	2,023,000	965,000	2,501,000
Barley, bus..	5,809,900	461,900	4,256,000
Rye, bus....	2,524,500	1,740,000	2,893,000
Clover Seed, bags	8,490	.....	19,491
Flax Seed, bus.....	687,200	10,400	.....
Hay, tons....	6,527	300 bales	43 bales
Flour, bbls..	1,311,963	685,398	1,087,000

NEW ORLEANS—Reported by S. P. Fears, chief grain inspector and weighmaster of the Board of Trade, Ltd.:

Receipts		Shipments	
1924	1923	1924	1923
Wheat, bus..	5,163,357	.....	.....
Corn, bus....	110,291	.....	.....
Oats, bus....	23,227	.....	.....
Barley, cars..	3	.....	.....
Rye, cars....	20	.....	.....

OMAHA—Reported by F. P. Manchester, secretary of the Grain Exchange:

Receipts		Shipments	
1924	1923	1924	1923
Wheat, bus..	5,896,800	5,588,800	2,934,400
Corn, bus....	971,600	1,069,800	1,290,800
Oats, bus....	1,786,000	1,728,000	2,708,000
Barley, bus..	155,200	92,800	243,200
Rye, bus....	338,800	81,600	254,800

PHILADELPHIA—Reported by A. B. Clemmer, secretary of the Commercial Exchange:

Receipts		Shipments	
1924	1923	1924	1923
Wheat, bus..	3,792,415	2,377,396	2,577,902
Corn, bus....	95,891	20,339	21,147
Oats, bus....	208,355	201,877	179,519
Barley, bus..	128,518	3,141	269,599
Rye, bus....	346,315	10,738	149,231
Flour, bbls..	301,578	265,437	74,528

ST. LOUIS—Reported by Eugene Smith, secretary of the Merchants' Exchange:

Receipts		Shipments	
1924	1923	1924	1923
Wheat, bus..	5,362,464	3,141,130	4,673,430
Corn, bus....	2,397,225	1,997,527	1,491,900
Oats, bus....	2,946,000	3,580,000	2,437,420
Barley, bus..	244,800	220,800	32,740
Rye, bus....	35,100	45,100	22,050
Kaffir Corn, bus.....	27,600	4,800	32,250
Hay, tons....	14,532	12,948	4,525
Flour, bbls..	468,910	524,460	654,570

SUPERIOR—Reported by W. E. Feidler, chairman of the Grain and Warehouse Commission:

Receipts		Shipments	
1924	1923	1924	1923
Wheat, bus.	13,347,482	2,707,448	11,095,991
Corn, bus.	116,421	6,627	60,000
Oats, bus.	1,662,065	233,871	1,409,707
Barley, bus.	3,202,168	561,672	3,861,113
Rye, bus.	4,298,774	917,306	1,162,222

HAY, STRAW AND FEED

HAY VICE PRESIDENT FOR OREGON

President Brown of the National Hay Association has appointed J. H. Lensch of Portland, Ore., as state vice-president for Oregon. Mr. Lensch is a member of the Lensch Bros., wholesale dealers in feed, hay, flour, etc., at Portland, and is well known to dealers throughout the state.

PROSPECTS BRIGHTEN

The Mutual Commission Company of Cincinnati, Ohio, under date of November 12, says: Colder weather with the prospects of an increased feeding demand is having its effect on the hay trade at Cincinnati at the present time. Receipts are light and country loading is reported smaller. Prices should advance gradually, but with the large amount of hay which is available in Michigan as soon as there is a reasonable advance in Cincinnati hay prices, there is no reason to feel that this market will experience any severe shortage or much higher prices for the next couple of months.

BALING SAVES THE HAY

Farm authorities after considerable study have come to the conclusion that between 20 to 30 per cent of the hay stacked outside is lost from unfavorable weather conditions and from poor stacking. But there are few farms which are adequately equipped to house all hay in the loose. With a baler this difficulty can to a great extent be overcome and members of the Research Department of the National Association of Farm Equipment Manufacturers who have investigated the matter thoroughly believe that more than \$100,000,000 would have been saved farmers last year if the hay had been properly baled and housed.

FEED LIFELESS IN NEW YORK

By C. K. TRAFTON

Conditions in the feed trade have been similar in many respects to those noted in my last. Many members of the trade have found it exceedingly difficult to account for the sluggishness. However, there were well informed members of the trade who felt confident that the apparent limited consumption of wheat feeds had been partly caused by the unusually mild weather this fall, which had resulted in excellent pasturage. Also it was claimed that many jobbers and distributors had a greater abundance on hand which had been held in storage for so long as to create a heavy and burdensome load.

In the judgment of some observers these supplies have been materially depleted lately and it was felt that there was a brighter prospect for a revival of business ere long. Bran that had been selling from \$30 to \$31 for prompt delivery has been sold for January at \$32 to \$32.50 and February at \$33. No doubt it is generally supposed that far larger quantities of wheat feeds will be consumed as soon as cold or stormy winter weather arrives.

Trade in corn products has been dull as the offerings thus far have been moderate and hence prices have not declined sufficiently to induce buyers to take hold. Business has been inactive in cottonseed and linseed meal, which was partly attributed to the unseasonable mild weather and as supplies have been slightly larger prices weakened moderately. Offerings of beet pulp both domestic and foreign have been ample which led to slightly lower figures and a fairly active trade.

STANDARDIZATION OF HAY*

The Department is frequently asked whether it is trying to put across a compulsory standardization program. No, we are not. We believe in letting the matter develop naturally to the limit of possibility, and the limit largely depends upon just such men as you—the men who stand between the producer and the consumer. If we get the support of men in the trade, our program can be put across on a permissive basis, but if we haven't this, the question comes up whether we should go beyond.

Our investigations regarding hay show that in some cases hay is put in the car in one place on one grade and sold somewhere else on another. That is uneconomic. There is something radically wrong when hay originating in northern territory, for example, in New York, in Ohio, in Michigan,

*Excerpt from address of Lloyd S. Tenny, Assistant Chief of the Bureau of Agricultural Economics, United States Department of Agriculture, before the New York Hay and Grain Dealers Association.

and moving south, changes grade when it crosses certain lines, or when it changes hands, from grade No. 2 or No. 3 to No. 1.

If you don't want compulsory grades on hay, these practices must be eliminated, because they are the practices that compel the Department of Agriculture to bring about compulsory inspection. If the hay trade can carry a product standardized as it comes to you from the producer through to the consumer on the same grade,—which it can if it wishes,—and if the trade organizations get behind that program, all of the advantages of permissive standards and none of the disadvantages of compulsory standardization will follow.

In the course of the next few years and not long distant, we are going to have to determine in the Department what our attitude is to be. We have been asked our opinion many times and we must decide whether we will have compulsory grading of hay, with compulsory inspection, or whether we will develop along the line of permissive grading. The whole question is up to you as to whether you wish to get back of a sound standardization program or whether you wish the hay business to continue in the same chaotic condition it has for years past.

THE PURINA MILL AT KANSAS CITY

The plant recently constructed in Kansas City, Mo., for the Ralston-Purina Company, embraces all the well developed special mechanical apparatus which has resulted from years of experience in

the position adjoining. The hay house can accommodate nearly 400 cars of hay.

Thirty years ago the Purina Mills were founded by W. H. Danforth, the present president of the corporation. Until 1912, St. Louis was the only point at which the company maintained a mill. Later plants were established throughout the country, at Nashville, Tenn., East St. Louis, Ill., Buffalo, N. Y., Ft. Worth, Texas, and Minneapolis, Minn. The latest addition in Kansas City, Mo., though additional mills are being considered for the Atlantic and Pacific States.

The problem which the company set for itself at its inception was that of making the best "balanced ration" they could achieve. To do this, their own laboratories, research farms, and chemists were set to work, and a great amount of money was expended in preliminary experimental work. As new processes were developed and new products were perfected the necessity for special machinery became apparent. Accordingly, the present devices referred to above as being exclusive in their adaption to these plants, were created.

The products constitute a full line of horse, dairy, poultry and fattening feeds. These are marketed under the company's brand as "chows" and various particularized feeds include Purina Omolene, for horses; Cow Chow and Calf Chow for dairy use; Pig Chow and Steer Fatena for fattening; Chicken Chowder and Hen Chow and several others for poultry.

The officers include W. H. Danforth, president,



THE RALSTON-PURINA MILLS, KANSAS CITY, MO.

running a specialized mill. It is located on the Missouri Pacific and the Kansas City Southern, thereby being assured of ideal facilities to get the raw product and rapid and efficient distribution of the finished product.

The main mill building is 62x100 feet and consists in six stories and a basement, made of reinforced concrete with face tile curtain walls. The hay grinding mill building is three stories and basement, 42x100 feet. There are two hay warehouses having steel frames on concrete foundations and these measure 128x100 and 160x100 feet respectively. The headhouse of reinforced concrete is 56x62x170 feet.

The mill was built by the Jones-Hettelsater Construction Company of Kansas City, Mo., and it was equipped by Sprout, Waldron & Co. Of course, a large amount of the machinery is especially made to suit this type of milling and a great number of these machines have been developed by the Purina company and built along the lines laid out by them.

Concrete grain storage has been provided, and the buildings will accommodate 1,000,000 bushels in storage. The plant has four Howe track scales, and they use bag conveying apparatus throughout.

On the left is the two-story office building from which all the local business is conducted. F. H. Udell, formerly at the company's St. Louis office, went to Kansas City to serve as purchasing agent, as did also the manager, Lewis B. Stuart; but the remaining force was made up locally.

The molasses tanks store 100 cars of molasses. The machinery of the company's own design and their processes are covered by patent. In the foreground of the picture is the Alfalfa grinding plant, and the hay and meal warehouses are located in

who is in St. Louis, and Lewis B. Stuart, local manager, and E. W. Noxon, who has been transferred from St. Louis, to be milling superintendent at Kansas City.

OLD POULTRY FEED IN NEW FORM

Insects of various sorts have always been a favorite food with poultry; but it is rather a new thing to hear of them offered for sale as commercial product. This has been done, however, and the particular dainty which one can now buy for poultry is locusts. They are also offered as cattle food. The locusts are dried and packed in bales or bags at about \$70 per ton. When ground they cost \$10 per ton more. The locusts are unpoisoned, of course. The composition is given as: fiber, 11.26 per cent; protein, 59.60 per cent; moisture, 9.05 per cent; ash, 5.12 per cent, and ether extract, 11.19 per cent.

TESTING THE COLOR OF ALFALFA

Department of Agriculture experts in the hay laboratory at Washington have devised a machine for testing the color of Alfalfa hay, which, it is believed, will prove entirely satisfactory. A simple method had been devised for measuring the percentage of green color present in Timothy hay, but this failed to operate successfully on Alfalfa, because in taking the plants from the bale the leaves shattered and it was found impossible to get anything approaching complete plant.

They tried to grind the Alfalfa into a meal and match the meal with the standard samples. But this too failed, because some of the plants were found to have white pith while others had yellowish

pith which, when ground, changed the color completely.

S. B. Seeds of the Department took the problem to the Bureau of Standards and it was suggested by the Bureau experts that the Munsell system for measuring color be studied. Finally a machine was designed and constructed which seems to work satisfactory and which is now being put through a number of experimental trials.

FEED COMPANY EXONERATED

Last May the Federal Trade Commission filed a complaint against the Larowe Milling Company of Toledo, Ohio, charging discrimination in the sale of animal feed products between arbitrarily designated "preferred" jobbers and retailers and all other jobbers and retailers.

The milling company filed answer to the charge denying the allegation and offering to place before the commission a full record of its business, etc. This offer was accepted, a full investigation was made and on October 3 the commission dismissed the charge and exonerated the manufacturers of "Larro-Feeds".

TENTATIVE GRADES FOR SOY BEANS

The United States Department of Agriculture has prepared tentative grades for soy beans, and has mimeographed copies on hand for merchants and dealers in the soy bean markets. At the last Grain Dealers National Convention, resolutions supporting the department in the issuance of tentative grades were passed.

The grades have been worked primarily from the standpoint of the industrial uses of soy beans but they may also be used in the marketing of commercial stocks of soy beans for seed purposes. Commercial production of soy beans has increased at a phenomenal rate during the past few years and the need for grades for this commodity is keenly felt.

Mimeographed copies of the tentative grades may be obtained upon application to the Bureau of Agricultural Economics, United States Department of Agriculture, Washington, D. C.

REDUCED PRODUCTION OF COWPEAS

According to reports circulated by the United States Department of Agriculture the 1924 commercial production of cowpeas is less than last year's small crop. Dry weather during the summer months cut the yield per acre materially. Rains later caused the pods to rot and many fields, it is reported, will not be harvested or are not worth harvesting. The supply of cowpeas that enters commercial channels, however, is not necessarily in proportion to the total production and with a marked advance in prices as a result of present indicated small production, there will be a tendency to place on the market a larger percentage of the crop than usual, using less on the farms.

COMPARATIVE VALUES IN MIXED FEEDS

By ROBERT W. CHAPIN*

You are familiar with the advice of a keen old lawyer, to his son who was beginning his practice: "Admit nothing, and don't believe even your own witnesses." However, not being a lawyer, I shall start right in with an admission, to this effect: In comparing a good home mixed ration, which a practical feeder had devised from his experience, and which he had carefully tested for results, with one type of a commercial mixed feed, evolved on paper, mainly to sell at a price, I should expect better results from the good home mixed ration.

Unfortunately, there are just as many home mixed rations devised from tables, and not from practical experience and definite tests, as there are commercial rations, so this discussion must cover the entire subject of feeding for low cost of milk production whether the dairyman uses home mixed ratios or those made by a manufacturer for his convenient use.

Let us first define a good dairy ration: 1. It must be palatable, keep the cow in good condition, and make milk up to the natural maximum capacity of the cow; 2. It must make milk economically, viz., at a low cost per 100 pounds of milk.

To the average dairyman—in fact even to the owners of registered herds, the idea that they could keep any track of their milk costs, has seemed a task calling for considerable time and effort. Their thought has been that they must keep complete daily records of each cow, and go to a great deal of bookkeeping.

If one is to determine the milk producing capacity of each cow, which is the thing which owners of registered herds who are raising cows for sale, always wish to know, it is then necessary to keep

careful individual records; but in determining the relative value of one ration compared with another, the total amount of feed used per day divided by the number of pounds of milk produced, will quickly show how much feed it takes to produce 100 pounds of milk.

If the complete farm cost of 100 pounds of milk is required, then a record of every item is necessary, but in comparing one ration with another, we know that the cost of hay, silage, and even of hired help remain as practically fixed items, over a considerable period of time, while the cost of the feed or grain ration is constantly varying, so that the cost of the grain ration is always closely watched by the farmer.

When grain and feed prices advance, it is just human nature, to look for something "cheaper," that is, less cost per ton. If, however, such lower cost feeds have to be fed in larger quantities to keep up the milk production, then instead of being "cheaper," they may be more costly. This is a question of fact which the farmer can determine for himself. To illustrate how easy it is to make a comparison between two rations, each costing different price, I will give the figures from a recent test at the Canton, N. Y. State School of Agriculture.

Ration No. 222 Production from five cows for 30 days, 1,726 pounds produced, 5,779 pounds milk or 30 pounds feed produced 100 pounds milk.

Ration No. 333, 1,658 pounds feed produced 4,957 pounds milk or 33½ pounds feed produced 100 pounds milk.

I shall purposely disregard at this time the difference in total milk produced and deal only with the cost of production, of the milk actually



ROBERT W. CHAPIN

made. The ration No. 222 cost \$2.70 per hundred-weight, so it cost 81 cents to make 100 pounds of milk (grain cost).

If ration No. 333 could be purchased at \$2.42 per hundredweight, then it would make milk at the same cost—33½ pounds of milk @ \$2.42 = 81 cents for grain cost.

The market price at that time for this No. 333 ration was \$2.60 per 100, so that while the cost per bag was 10 cents less, and consequently looked "cheap," yet on the basis of its value for milk production, it was 18 cents per bag or \$3.60 per ton higher than the other ration.

I have used the figures in this test to illustrate two facts. First, that any farmer can follow out the method used in this test easily and compare one ration with another for economy in milk production, without the slightest knowledge of digestible nutrients, the ingredients, or the chemical analysis. He can do this with two different home mixed rations, or he can compare his home mixed ration with a commercial ration.

Because of the fact that cows differ, one from another, so materially in their protein requirements, and also because the nature and the quality of the roughage available is an important factor, the dairy farmer who determines for himself, just what a particular ration will do for his herd, and with his roughage, will always secure much more accurate knowledge than will be the case if he accepts the word of any manufacturer, that a certain ration will produce a certain amount of milk. He may be told that 25 pounds of "A B C" Ration will produce 100 pounds of milk, while by making his own test he may find it will require 40 pounds of this "A B C" Ration to produce 100 pounds of milk, and at the same time maintain milk production. Exactly the same condition prevails with regard to any ration suggested to him by outside feeding authorities, no matter whether this comes from a cow tester, the State College or a farm paper.

No one has yet acquired enough knowledge, nor

is such knowledge available in any text book, to determine in advance, what the milk production will be from a combination of various feeds, until such a combination has been tested on dairy cows.

The fact that one feed has the same chemical analysis is another, as regards proteins, fat, etc., is no guarantee that it will produce the same results. Furthermore, the fact that it has the same amount of so called digestible protein, or digestible nutrients, as another feed is no guarantee whatever, as I shall show you shortly.

It is upon this fallacy that the whole idea of the "open formula" is based. The only thing that can be known, with reasonable certainty, is that if a combination of certain feeds is made into a ration, tested for results for milk production, and the results noted; then this same combination of feeds, without any modification whatsoever, will give equivalent results in the production of milk, with the same breed of cows, having the same fat test in their milk, provided also the same roughage is used.

Substituting in a ration 11.1 pounds of linseed meal to replace 10 pounds of cottonseed meal, or vice versa (each has 3.34 pounds of so called digestible protein), is one of the favorite indoor sports in making up rations. What the cow may do, when the ration is thus changed, is another story. The dairyman who compares one ration with another on his own farm, can secure more complete knowledge of the value of a ration, as far as his needs are concerned, than any one else can possibly give to him.

If he does nothing else but take one day's record and finds that he is feeding 300 pounds of ration to get 800 pounds of milk (with Holstein cows and good roughage), he has taken the first step in real knowledge. If a feed manufacturer is advertising that he is making a ration, 200 pounds of which will produce 800 pounds of Holstein milk, then the farmer only has to test it and find out whether it is so, and, if it is, then he can easily tell whether he can save money by using such a ration, no matter whether it is 20, 25 or 30 per cent protein.

In the current year, 1924, it is a fair estimate that the farmers in New York State will purchase grain and feed for their dairy cattle at a cost to them of more than \$40,000,000. It is likewise an equally fair estimate, in fact a moderate one, to state that \$5,000,000 of this amount represents an economic waste; that is, money unnecessarily spent for milk production. Thanks to the work of Cornell University, we have their Bulletin No. 409, published April, 1922, entitled, "An Economic Study of Dairying on 149 Farms in Broome County, N. Y." I shall give you from this bulletin certain very significant facts.

For the needs of 2,058 dairy cows, mainly Holsteins, there was purchased and fed during the winter period 1307.2 tons of grain and concentrates. This was fed and produced milk at the rate of 42.8 pounds per 100 pounds of milk. Eighty-five per cent of the rations fed were home mixed. After making due allowance for young cows, old cows, and various "dirt farm" conditions, I shall make the statement that, with a properly combined ration, either home mixed or commercial, the same milk production could have been secured by feeding 28 pounds of grain per 100 pounds of milk, instead of 42.8 pounds, as actually fed. This would require the purchase of 917 tons of the better ration instead of the 1307.2 tons actually used.

At a cost of \$44 per ton for the ration used, 1307.2 tons would cost \$57,516.80. We have never seen the time when a good ration cost over 25 per cent more than an ordinary one (and usually the difference is less), but we will take the outside figure, 25 per cent more, and make the price of the better ration \$55.

At a cost of \$55 per ton for the better ration, 917 tons would cost \$50,435, or a saving of \$7,081.80, which is 12½ per cent of the money spent for purchased grain and feed.

No reference is made in this bulletin to any improvement in feeding methods between the time this data was originally corrected and the time the bulletin was published. If this has occurred, I shall be inclined to credit it to a greater use of the better kinds of commercial mixed feeds. So that you will not consider these figures exceptional, or peculiar to any one section, I will state briefly that similar, officially compiled data, shows that the grain ration used during the winter feeding months was as follows, the figures given being the quantity used to make 100 pounds of milk: In Illinois on the average farm, 44 pounds; in Indiana, 48.6 pounds. There are figures available from a number of other states which indicate similar conditions.

With all the information given to the dairyman through farm papers, and by state college bulletins, why are not his home mixed rations better than they are? To my mind, and what I will say to you will be based on determined facts, the present entire structure of feeding instructions and feed formulas is on an incomplete, and consequently on an incorrect, basis. The science of feeding for milk production is very recent. Gruven, a Ger-

*From an address by Robert W. Chapin, president of Chapin & Co., Chicago, at the annual convention of the Association of Feed Control Officials, Washington, D. C., October 23, 1924.

man, in 1859, is said to be the first man who suggested compounding dairy rations, with reference to the actual amounts of the different nutrients, such as protein, carbohydrates and fat. Not very much later Henneberg suggested that only the digestible nutrients be considered in the calculation of rations.

Gradual progress was made, both in Europe and in this country, and commencing about 1900, up to 1912, a series of experimental tests were made by American research workers, to provide more complete data for the digestibility of the proteins, carbohydrates, fat and fiber, in grains, feeds, and roughage. The great majority of these tests were made with sheep, for two reasons: one, that it was much easier, from the standpoint of convenience, to use sheep in these tests; and the other reason was the assumption, which has since been proven to be incorrect, that the digestibility of a feed was the same in sheep as in the milking dairy cow. Other tests were made with cattle at rest, but, as far as I can learn, it was not, at that early date considered necessary to make these digestion tests specifically in connection with dairy cows giving milk.

Many of these tests were made by the Massachusetts Experiment Station, and other tests were made at the New York Agricultural College, and by the United States Department of Agriculture. These various reports have been compiled and averaged with a great deal of labor. The most complete combined tables are those given in the book "Feeds and Feeding," by Henry and Morrison, and these are the tables most generally used.

(To be continued)

NEW ALFALFA RESEARCH LABORATORY

A new research laboratory for Alfalfa, the only one outside of Washington, is to be established at Kansas City, Mo., by the Department of Agriculture. It will be the work of the laboratory to determine the best varieties of Alfalfa hay for production in certain sections of the country. The effect of climatic conditions on Alfalfa will be given particular attention.

F. S. Kellogg, present head of the hay, feed and marketing bureau of the Government at Kansas City, will be in charge of the laboratory, assisted by a staff of experts. As soon as all the equipment for the laboratories is received the office will be opened. The building leased is advantageously located close to the hay tracks of many of the Kansas City railroads.

HAY DULL IN NEW YORK

By C. K. TRAFTON

Practically all members of the hay trade in the Metropolitan district have manifested great dissatisfaction, not to say disgust, because of the remarkably stagnant condition of the market during the past month. It must be admitted that a large part of the trucking has been as usual lately done by auto trucks which has naturally curtailed the employment of horses.

Nevertheless, it has been said that fully as many horses are being used for driving and riding purposes, that is, for pleasure. As was to be assumed, therefore, the demand, such as it was, was mainly confined to superior grades of Timothy or Light Clover Mixed, and consequently receivers of the superior descriptions have not been compelled to make important concessions on cost, but on the other hand it has been extremely difficult, if not impossible, to sell ordinary or inferior grades excepting at lower figures. This was particularly true of poor trash arriving via river boats, which was so exceedingly difficult to dispose of that in many cases the price received was so low as to scarcely pay freight and other charges.

It was the consensus that the depression was mainly, not only, caused by the dullness, but also by the fact that the production in the past season was excessive, far too much for requirements, not only in this country but in Canada and as a result liberal shipments have been made from Canada into our markets both by rail and canal boats, but notably the latter and as this hay has been offered freely at low cost it has naturally crowded out native hay.

Although receipts have been abundant and stocks have continued somewhat excessive they might have been even heavier had the shipments from the West been as large as in former seasons. More than enough hay is raised in nearby states to keep this market supplied and furthermore western hay could not be shipped here excepting at a loss, partly because of the freight charges but in addition it was averred that the feeding of hay throughout the West has been on a larger scale than here, and consequently it was possible to obtain as much, if not more, money than current here regardless of freight.

In some quarters it was also alleged that the light consumption has been partly attributable to the unusually fine as well as mild weather for the season, which has of course provided unusually by

good pasturage at this stage. This latter has of course also affected the consumption of corn and corn products as well as millfeeds.

Dullness and heaviness were salient features in the straw market. No doubt the mild weather has led buyers to hold off, and as one shrewd receiver remarked "You don't have to supply bedding to an automobile."

NEW FEED BRANDS

"KING WHEAT SHORTS" stock feed. Washburn Crosby Company, Minneapolis, Minn. Filed January 21, 1924. Serial No. 191,109. Published October 14, 1924.

"MILKMORE DAIRY RATION" mixed feed for cattle. Eastern States Farmers Exchange, Springfield, Mass. Filed June 18, 1923. Serial No. 182,140. Published October 21, 1924.

"CHALLENGER" dairy feed made of grains. Jameson-Hevener Company, St. Paul, Minn. Filed July 1, 1924. Serial No. 199,427. Published October 21, 1924.

Trademarks Registered

190,738. Alfalfa meal. The Denver Alfalfa Milling & Produce Company, Lamar, Colo. Filed May 20, 1924. Serial No. 197,326. Published August 19, 1924. Registered October 21, 1924.

190,757. Farm feed or shorts, that is, stock feed, poultry feed, and chick feed. Ballard & Ballard Company, Louisville, Ky. Filed April 10, 1923. Serial No. 178,890. Published August 12, 1924. Registered October 21, 1924.

191,193. Poultry feed. Quisenberry Feed Manufacturing Company, Kansas City, Mo. Filed June 1, 1922. Serial No. 164,773. Published April 3, 1923. Registered November 4, 1924.



191,194. Poultry feed. Quisenberry Feed Manufacturing Company, Kansas City, Mo. Filed June 1, 1922. Serial No. 164,774. Published April 3, 1924. Registered November 4, 1924.

190,856. Poultry feed. Quisenberry Feed Manufacturing Company, Kansas City, Mo. Filed May 22, 1922. Serial No. 164,265. Published April 3, 1923. Registered October 28, 1924.

190,994. Prepared stock feed. Moorman Manufacturing Company, Quincy, Ill. Filed June 16, 1924. Serial No. 198,664. Published August 12, 1924. Registered October 28, 1924.

A new feed mill is being erected at Pine Island, Minn.

G. H. McElroy has opened a feed and flour business at Marshall, Ark.

The Rigsbee Feed Company has installed a new feed mill at Cordell, Okla.

The coal and feed business of E. E. Myers of Wyoming, Iowa, has been bought by R. D. Cooley.

W. Edward Picquet has sold his feed and flour store at Pana, Ill., to Barnstable & Schapher of Nokomis, Ill.

A feed plant at Peoria, Ill., has been taken over on a rental basis by the G. L. F. Exchange of Ithaca, N. Y.

The Springdale Feed Company recently bought the W. W. Wedge Company's grain business at Springdale, Wash.

The new warehouse of the Dairymen's Feed & Supply Company at Riverside, Calif., has been opened for business.

Jacob Smith of Leslie, Ark., has consolidated his feed store there with that of his brother, Verge, also at the same place.

A feed and seed store is being established at the A. B. C. Warehouse at Longview, Wash., managed by W. H. Newcomb.

A branch store is to be started at Montgomery, Ala., by J. B. Deeds & Son of Nashville, Tenn., to handle "Jay Bee" feeds.

T. A. Dudley has sold out the Kentucky Feed Company at Flemingsburg, Ky., to W. A. Davenport, who will take charge at once.

Ramsey Bros., consisting of Burley and Warner E. Ramsey, have succeeded the firm of Ramsey & Son of Port Hope, Mich. Both are experienced hay men.

George Lopex, sales manager of the Mountain States Mixed Feed Company of Denver, Colo., writes us: "Our new mill is now in full operation and we are meeting with splendid demand, in fact, even

greater than we had hoped for, and all in all, we are pleased and encouraged with the bright outlook."

Chas. Fay & Son who bought the St. Peter Feed Mill at St. Peter, Minn., from John Brady, is making extensive improvements on it.

The feed department of H. P. Zivemer & Son at Holland, Mich., has been bought by Elanbaas Bros., Inc., Purina Chow dealers of Grand Rapids.

Articles of incorporation have been filed by the Western Mill Feed Company, Ltd., of Climax, Sask. The capital stock of the company is \$100,000.

The Bernard Mill & Coal Company of Holton, Kan., is building an addition to its property. The company is engaged in the manufacture of a high grade chicken feed.

A feed plant has been installed at Joel, Wis., for the Anderholm Bros., Inc., of Clear Lake, Wis. This comprises a Monarch attrition mill and a 50 horsepower motor.

The new warehouse of the Alfalfa Milling Company of Kearney, Kan., has been completed. The building is 40x100 feet and will add considerably to the capacity of the plant.

The feed mill of F. F. Harrison at Edinboro, Pa., has been sold to the Edinboro Co-operative Association. He plans to continue operation in another mill which he owns in the same town.

Articles of incorporation have been filed by the Wilber Feed Company, Inc., of Jamestown, N. Y., capitalized at \$50,000. H. R. Wilber, B. A. Wilber and J. L. Anderson are interested.

The All-States Feed Mills, Inc., manufacturers of mixed feeds, are reported to being liquidated at Memphis, Tenn. L. B. Chevallier is president and is attempting to reorganize the concern.

A half interest of W. W. Hartell in the feed, flour and poultry business at South Haven, Kan., has been sold to Tom Hellingsworth. The new firm will be known at Hellingsworth & Hartell.

The O'Connell Feed Mill at Independence, Kan., has been bought by W. H. Payne, owner of the Payne Grain Company, from Frank O'Connell, who has operated the place since the death of his father.

J. O. Morris and O. F. Everett are remodeling a building at Colville, Wash., preparatory to operating as the Columbia Feed Store. The equipment will include an elevator, chopper, roller, cleaner and grader.

A new warehouse has been completed at Columbia, Tenn., by W. N. Butler & Co., for the storage of feedstuffs and hay. The company will do a regular storage and warehouse business. It has capacity of 20 cars of grain with ample space for hay.

A building is being erected at East Carondelet, Ill., by G. J. Rubel in which he will conduct a chicken feed and cornmeal mill. He will have the mill ready by November 1. The capacity is estimated at 250 sacks chicken feed and 80 sacks cornmeal per day.

The Idaho Alfalfa Milling Company of Payette, Idaho, has changed its name to the Payette Alfalfa Mill Company. It has undergone a change in management and ownership. W. G. Pence, John R. McKinney, Henry Barker, H. B. Pence and J. L. Wells are interested.

J. C. Higdon has formed a partnership with E. S. Claxton of Montgomery, Ala., and are now conducting the Happy Feed Store. Mr. Claxton has been with the Dixie Feed & Seed Company for the past three years and recently acquired a controlling interest of the business.

A change has been made in the name of the Montclair Flour, Feed & Grain Company of Montclair, N. J., to the Montclair Feed & Fuel Company. The company has extended its operations and now handles coal, wood, etc. Later on it expects to erect tanks at their plant for fuel oil.

J. C. Waggoner has retired from the Central Feed Wharf business at Port Orchard, Wash., and the business is being conducted by H. J. Horluck and George F. Horluck. They will install grinding and feed mixing equipment soon which will enable them to handle their increasing business with a greater expediency.

A new warehouse and feed plant is being built for the Stryker Farmers Exchange of Stryker, Ohio. Among the equipment will be a 24-inch Bauer Motor Driven Attrition Mill, Bauer Corn Cob Crusher, Eureka Mixer, several motors, Sidney Cracked Corn Grader, Sidney transmission and elevating equipment.

The Miller Flour Mills of Yakima, Wash., recently installed complete feed milling equipment in one wing of the mill warehouse. The machinery included one Ross Corn Polisher, one Ferrell Clipper Cleaner and Grader, one Bar-nun Grinder, one California Cone Batch Mixer, one Barley Roll and one Le Page Cut Corn Cracker. They also installed an elevator for unloading bulk wheat from cars into the mill. All of the machinery was bought from the J. J. Ross Mill Furnishing Company of Seattle, Wash.



ILLINOIS

P. B. Rollings has bought the C. L. Smith Elevator at Milmine, Ill., and is in possession of it.

Ellison Hendricks is now manager of the Farmers Grain Company at Waggoner, Ill. He was formerly at Raymond.

Business operations have been discontinued by the La Prairie Farmers Co-operative Elevator Company of La Prairie, Ill.

The grain elevator at Sheldon, Ill., until recently operated by the Cleveland Grain Company, is to be conducted hereafter by the J. C. Shaffer Grain Company of Chicago, Ill.

H. M. York has gone to White Heath, Ill., where he will conduct a grain and lumber business. He was for years engaged in the grain business with Murray & York of Symerton, Ill.

The Export Elevator Company's Union Elevator at Chicago has been leased by the Grain Marketing Company. It will be used for the storage of oats, and has a capacity of 1,500,000 bushels.

Capitalized at \$50,000, the Carlinville Milling & Supply Company has been incorporated at Carlinville, Ill. The company will conduct a general milling business and will manufacture feedstuffs.

The elevator of the Funk's Grove Grain Company which burned at Funk's Grove (McLean p. o.), Ill., on October 3 is to be rebuilt. The elevator, together with 25,000 bushels oats and 5,000 bushels wheat, was totally destroyed.

The Pontiac Farmers Grain Company of Pontiac, Ill., has completed a new elevator at Rugby, Ill. It has modern equipment, including a dump, Fairbanks-Morse Type "Y" Engine, automatic scale, two legs, low driveway, and has capacity of 21,000 bushels.

THE DAKOTAS

John Obrigewitsch & Son have opened the Walton & Davis Elevator at Dickinson, N. D., for business.

The Schulz Grain Company of Harvey, N. D., has been opened for business with David Raugust as manager.

The Ferney Farmers Elevator Company has bought the elevator of Potter, Garrick & Potter at James, S. D.

C. F. Bohn is succeeded as manager of the Frankfort Mill & Elevator Company at Frankfort, S. D., by Ed Lindgren.

C. A. Carlson & Sons, who have sold their two elevators, have leased another one at Arlington, S. D., to Potter, Garrick & Potter.

The Alexander Grain Company's elevator at Alexander, N. D., has been bought by the King Grain Company from J. C. Smith.

Matt Bayer, Wendell Olson and W. P. Brown have incorporated at Emrick, N. D., as the Emrick Grain Company. The firms capitalized at \$10,000.

A new truck dump has been installed in the elevator of the St. Anthony & Dakota Elevator Company at Easby, N. D., of which H. Holz is agent.

J. A. Buckingham has been succeeded as manager of the Farmers Co-operative Elevator at Maxbass, N. D., by Thomas Worthing who for some time was assistant manager at Clementville, N. D.

The interests of the Butte Grain Company of Sentinel Butte, N. D., has been absorbed by the Farmers Elevator & Trading Company who will consolidate the businesses of the two elevators.

John Kozel has resigned his position as manager of the Plumb Grain & Supply Company, Plumb (Lesterville p. o.), S. D., and succeeds A. A. Patric as manager of the Farmers Elevator at Lesterville.

The Farmers Elevator Company of Hamberg, N. D., has been organized there and the company has bought the elevator sold some years ago by the former Farmers Elevator Company to the Equity Exchange.

Herman Gherke has bought the property formerly owned by the Merricourt Equity Elevator Company at Merricourt, N. D. Mr. Gherke was formerly manager of the Hebron Farmers Union Elevator Company. He is operating as the Merricourt Grain Company.

The Farmers Elevator Company of Wessington Springs, S. D., has been reorganized under the name of the Farmers Co-operative Elevator Company. The officers of the company are: J. T. Wheeler,

president; A. J. E. Olson, vice-president; George Martin, secretary and treasurer, and V. H. Buoye, manager.

A. A. Brown, formerly manager of the Coburn Farmers Elevator Company, will succeed C. P. Elliott as manager of the Sheldon Farmers Elevator Company of Sheldon, N. D.

The Belfield Farmers Union Elevator Company's new 40,000-bushel elevator at Belfield, N. D., which replaces the one which burned a short time ago is already taking in grain, although not quite completed.

INDIANA

The Em. Nading Grain Company has installed an electric feed grinder in its elevator at St. Paul, Ind.

A grain and feed store at Mishawaka, Ind., has been bought by E. H. Downs who will operate the property.

The transfer elevator at Schneider, Ind., which has been idle for two years or more, is to be opened for business in the near future.

The interest of Elmer McClain in the Farmers Grain Company of Metcalfe, Ind., has been bought by O. Linebarger. The firm owned 11 elevators.

The Urmston grain elevator at Summitville, Ind., has been taken over by Logan Hinshaw, of Ingalls, Ind.; with the elevator go the coal bins and coal business.

The elevator at Newport, Ind., formerly operated by the American Hominy Company, has been bought by the Newport Grain Company which will operate it.

James Stewart & Co., of Chicago, Ill., have just started work on auxiliary plant for the American Maize Company of Roby, Ind., which will be used for the manufacture of refined starch.

Luther E. Greenwood of Lafayette has bought the grain elevator of the William B. Foresman Company at Foresman, near Otterbein, Ind. Mr. Greenwood will operate the property.

The Western Indiana Grain Shipping Company has been incorporated at Terre Haute, Ind., capitalized at \$1,000. The incorporators are Bert M. Coltrell, Daniel V. Coltrell and Buena V. Marshall.

Capitalized at \$10,000, the Morristown Elevator Company has been incorporated at Morristown, Ind. The incorporators are Horace E. Kinney, Laura J. Kinney, J. Harvey Snider and Jennie M. Snider.

Marion Depuy, Clarence Maddox and Henry Storr have bought the elevator at Dana, Ind., formerly owned by the National Elevator Company and will operate as the Dana Elevator Company.

A new feed grinder has been installed in the elevator of the Farmers Grain & Mercantile Company at Milford Junction, Ind. A 50-horsepower electric motor has also been installed for operating the grinder.

John M. Sample of Madison, Ind., grain, flour and seed wholesaler, has opened a warehouse there. With the aid of his two sons, Mr. Sample will shortly begin the manufacture of poultry and dairy feed products.

IOWA

A 20,000-bushel annex is to be built to the elevator of the Farmers Elevator Company at Leland, Iowa.

J. Johnson is now manager of the Zaneta Grain & Lumber Company of Zaneta (mail to Dike), Iowa.

The Farmers Elevator at Superior, Iowa, is to be managed by T. A. Strid. He succeeds Mr. Friend, who resigned.

A cash grain office has been opened at Storm Lake, Iowa, by Mark Tracy representing J. J. Badenoch & Co. of Chicago.

The Farmers Elevator Company of Mount Union, Iowa, has been re-incorporated. They were first incorporated in February, 1921.

A. H. Miller has bought the elevator at Bernhard, Iowa, and is repairing and painting it. A new engine will also be installed.

A. J. Froning & Son succeed the Garrison Grain & Lumber Company which has been operating at Garrison, Iowa. A. J. Froning and L. E. Runyan are operating the house.

The partnership of Egan, Greig & Stockdale of Ellsworth, Iowa, has been dissolved, the latter two

withdrawing. A new company to be known as Egan & Co. has been formed and will control a string of 260 elevators throughout the Northwest with headquarters at Minneapolis.

The offices of the Independent Grain & Lumber Company at Zaneta and Hanford, Iowa, have been closed and all of the business is being conducted from Stout, Iowa.

A large elevator at Lakota, Iowa, formerly owned by Greig & Stockdale has been moved to Stevens, Iowa. It is now owned by the Farmers Co-operative Elevator Company.

F. W. Straight of Auburn and G. F. Wilde of Fonda, Iowa, have formed a partnership at Fonda, as the Wilde Grain Company. They will conduct a grain business there.

George Christensen has opened a brokerage office in the Snell Building at Fort Dodge, Iowa, buying for all markets on a strictly brokerage basis. He was for years in the grain business there.

A grinder has been installed for grinding feed in the elevator of the Farmers Elevator Company of Webster City, Iowa. R. W. Hall is manager. Motors of 20-horsepower furnish the power.

A new grain and feed business has been opened at Seymour, Iowa, by A. W. Gump and L. A. Park. A number of different grinders have been installed and a stone burr has been put in for grinding cornmeal.

WESTERN

The Inter Ocean Elevator Company has just completed a new plant at Drummond, Idaho.

J. A. Pease has resigned as manager of the Portland, Ore., office of the Bunge Western Grain Company.

The warehouses of the Milwaukee Grain & Elevator Company at Warden and Lauer, Wash., have been closed up.

The Crocker Grain Company has bought the Sherman Warehouse at Grass Valley, Ore., and will operate it under the name of the Crocker Grain Company.

The Farmers Grain Company has added storage capacity to its property at New Raymer, Colo., to the extent of 8,000 bushels. A 15-horsepower engine was also installed.

The elevator of the Farmers Elevator Company at Ismay, Mont., has been bought by A. C. Tracy, formerly agent for the Columbia Elevator Company and is operating it.

The Sunset Milling & Grain Company's new warehouse and elevator at Los Angeles, Calif., is nearly completed and should be ready for operation in the middle of November.

The Kelley Grain Company has been organized at Pullman, Wash., by A. E. Kelley and H. A. Hughes. They have also organized the Kelley-Hughes Warehouse Company, capitalized at \$18,000.

The elevator of the Equity Co-operative Association Elevator Company at Shelby, Mont., has been rented by William Halter of Sunburst. He now operates at Sunburst, Kevin and Shelby.

The Pondera Distributing Company has been incorporated at Conrad, Mont., and will take over the Hirschberg Merchantile Company. The company will handle farm products, grain, cream, poultry, etc.

Frank E. Ford has retired from his position with the Portland, Ore., office of the Ryer Grain Company. His place has been taken by D. J. Conway, who was formerly connected with the Seattle office of the firm.

Charles H. Hake, Frank H. Miller, Gilman C. Herring, R. E. Elvis and Edward Afolter have incorporated at Lafayette, Colo., as the Lafayette Farmers Milling & Elevator Company. Its capital stock is \$3,000.

The new plant of the West Coast Grain Company at Los Angeles, Calif., is now occupied by the company. Charles G. Glen is with the company as salesman. He was formerly with the W. R. Beatty Brokerage Company.

A warehouse at Idaho Falls, Idaho, has been bought by the Great Basin Grain Company of which P. E. Rigby is manager, and will make alterations and changes throwing the present building and warehouse into one. Three bins of 4,000 bushels' capacity have also been completed for the

company. The Great Basin Grain Company, a Utah corporation, has filed articles of incorporation in the State of Idaho. P. E. Rigby has been named authorized agent for the state.

The Clovis Mill & Elevator Company of Clovis, N. M., has just completed a two-story ironclad flour warehouse and finished ironcladding its frame mill. The company also installed a Kewanee Truck Dump in its Elevator "B".

Lee L. Hershberger of Hubbard, Ore., has bought the milling interests of the Oregon Milling & Warehouse Company at Independence, Ore. Included in the property are the 100-barrel flour mill and 80,000 bushel elevator and feed and seed mills.

The Farmers Grain & Milling Company of Filer, Idaho, and the elevators at Buhl, Kimberly, Hansen, Hazelton and Jerome, Idaho, have been taken over by the Farmers Grain & Milling Company of Pocatello, Idaho. W. M. Smith is general manager of the company.

The elevator of the Benchland Grain Company at Benchland, Mont., which has been operated under lease by the Montana Elevator Company, is not being leased by the latter firm this year. The Benchland company is operating it with W. M. Teslow as manager.

EASTERN

George W. Haxton & Son have completed enlarging their elevator at Wyoming, N. Y., and now have capacity of 20,000 bushels.

A new portable marine tower is in operation at the Frontier Elevator at Buffalo, N. Y., increasing its unloading capacity to 45,000 bushels per hour.

Owen P. Brosium of Christiana, Pa., is now traveling for Levan & Boyd, wholesale grain and feed dealers of Lancaster, Pa. Mr. Brosium was formerly in the milling business.

The grain business of Charles C. Moore at Goffstown, N. H., has been sold to the Merrimack County Farmers Exchange of Concord, N. H. They will continue the retail grain trade at Goffstown.

Charles F. Strasmer has been retired by the Pennsylvania Railroad with full privileges of an employee for life. He had been with the railroad and its subsidiaries including the Connecting Terminal Elevator, of which he was superintendent for years, since 1878.

The Saskatchewan Co-operative Elevator Company, Ltd., of Regina, Sask., has plans under way for the erection of a terminal elevator at Buffalo, N. Y. It will have a capacity of 1,100,000 bushels and will cost \$800,000. This company already has 434 country elevators with a total capacity of 13,900,000 bushels.

Henry H. Wilber, who last March resigned his position as head of the Ames-Burns Company of Jamestown, N. Y., has organized a new firm at Jamestown under the name of R. H. Wilber & Co. With him will be associated J. Leon Anderson. They will do a wholesale business in millfeeds, oil meal, hominy feeds, etc.

All the concrete work is now completed on the State Barge Canal Elevator at Oswego, N. Y., and the machinery is nearly all installed in the warehouse. The structural steel work of the two marine towers is yet to be finished together with the installation of the machinery. It is expected to have the house ready for operation by December 1. James Stewart & Co., of Chicago, Ill., are the contractors and builders.

MINNESOTA AND WISCONSIN

A grain elevator has been opened at Lime Center, Wis., by Fred Fehly for the Dadmun Bro.

A building at Aniwa, Wis., has been bought by G. Arsten who will remodel it for feed store and grain elevator.

The Hunting Elevator Company has bought the Farmers Elevator at Huntley, Minn., and is now operating the house.

E. E. and P. R. Lietz of Eyota have leased the Harris Elevator at Simpson, Minn., and will conduct a grain business there.

The Redwing Manufacturing Company has bought the plant of the Great Western Grain Company at Clinton, Minn. C. E. Keunedy is buyer.

The Red Lake Falls Milling Company's new elevator at Red Lake Falls, Minn., has been opened for business with W. J. Pillion as manager.

The Farmers Mercantile & Elevator Company of Bombay (Kenyon p. o.), Minn., has sold its assets to the Fleischmann Malting Company of Red Wing.

H. N. Lunde of Dwight has bought the elevator at Bowlus, Minn., formerly operated by Louis Kohn. The interest in the potato warehouse is retained by Mr. Kohn.

A new warehouse has been built at the store and offices of Harry Hinchcliffe & Co., of Racine, Wis., dealers in grain, flour, feed, seeds and building materials.

Hans J. Thorstenson of Northwood, N. D., has leased the elevator at Rothsay, Minn., formerly owned by the Northwestern Elevator Company and

more recently operated by Anton Soon & Co. Mr. Thorstenson has been in the employ of the same company at Northwood for 11 years.

The Bingham Bros.' elevator at Redwood Falls, Minn., has been bought by G. A. DeWerd. The elevator is being overhauled and a new feed mill is being installed.

Extensive repairs have been made to the place of business of the Farmers Co-operative Elevator Company at Union Grove, Wis., and a new coal shed is being added.

A new elevator is to be built at Mapleton, Minn., for the Equity Elevator Company replacing the one destroyed by fire. The building will be of wood, covered with iron and iron roof. Its capacity is 24,000 bushels.

The contract has been let by the Equity Elevator Company of Montevideo, Minn., for a 25,000-bushel, 12-bin elevator. It will be motor driven and modernly equipped throughout including a dump in the driveway.

The Green Bay & Western Railroad has made plans for the erection of a concrete elevator with storage capacity of 500,000 bushels at the rear of the present elevator at DePere, Wis. It will be 40x143 feet and 103 feet high.

J. R. Stewart of the Banner Grain Company has bought the cleaning and mixing house at Kasota, Minn., which has been idle for some time. He bought the property from the defunct Gee-Lewis Company of Minneapolis, Minn.

The Occident Grain Elevator at Duluth, Minn., has just been equipped with an additional dust collecting system furnished by the Cyclone Blow Pipe Company of Chicago. It includes 15 Cyclone Dust Collectors, with an auxiliary fan system.

Frederick Debreaux has established the Green Bay Grain & Seed Company at Green Bay, Wis. He was formerly manager of the Cargill Grain Company's elevator at Green Bay and more recently was associated with the Badger Grain Company.

Tentative plans have been completed by the Albert Dickinson Company of Minneapolis, Minn., for a feed mill, warehouse and elevator to replace the plant which burned two months ago. The contract has been awarded for seven tanks with capacity of 50,450 bushels.

MISSOURI, KANSAS AND NEBRASKA

A new elevator is to be built at Trenton, Neb., for William Sheridan.

F. J. Lentz has given up his position as manager of the Seward Elevator Company at Carrollton, Mo.

Chas. P. Nelson has resigned his position as manager of the Leoti Mill & Elevator Company of Leoti, Kan.

The grain elevator of Mr. Bullen of Concordia, Kan., at Talmo, Kan., has been bought by J. B. Sherwood.

F. E. Scovell has resigned his position as manager of the Farmers Elevator Company at Washington, Mo.

The D. J. Fair Company's elevator at Sterling, Kan., has been bought by Oline & Atherton who are now operating it.

C. N. Bunds has bought the Winchester, Kan., elevator and has I. L. Stoeffler as manager. He will repair and remodel the plant.

The Farmers Union Elevator at Elkhorn, Neb., has been bought by H. A. Nolte and Clyde Hollister who will operate both elevators there now.

A large storage elevator and warehouse are being built at Deerfield, Kan., for the Denver Alfalfa Milling & Products Company in connection with its mill.

Brownfield & Teare are building a new elevator at Craig, Mo., of the same capacity as the one which burned, 30,000 bushels. It will be operated by electric motors.

A new warehouse is being built for the Grigg Grain Company at Coffeyville, Kan. It will be covered with galvanized iron and will be used as a warehouse and office building.

The elevator of the Elsmore Mill & Elevator Company of Elsmore, Kan., is to be overhauled and a new sheller and drag dump, dump sink pit, is to be installed and motors rearranged.

Three large grain storage elevators are being built adjoining the elevator of the J. P. Gibbons Grain Company of Kearney, Neb. The 25,000-bushel addition will be ready some time this month for operation.

Armour Elevator "A" on the Santa Fe between Turner, Kan., and Argentine, is to be enlarged at a cost of more than \$1,000,000. Work preliminary to the development has been started. The capacity of the elevator will be increased 500,000 bushels, the total capacity becoming 6,000,000 bushels. The elevator is owned by the Santa Fe Railroad and is leased and operated by the recently organized Grain Marketing Company of Chicago. The John S. Metcalf Company of Chicago is the architect and builder of the new addition. The machinery

to be installed will include four Metcalf Automatic Car Dumpers. With this equipment 240 cars can be unloaded in eight hours.

The grain and coal business of the Walters Grain Company at Riley, Kan., has been bought by W. S. Timmons. Mr. Timmons will operate his new property together with his old elevator.

The Dunlap & Dove Company of Bridgeport, Neb., has let the contract for the erection of a 10,000-bushel elevator. This elevator will be equipped with modern machinery and will have a warehouse and office in connection.

O. Crain is now taking over the property of the Labette Grain Company at Labette, Kan. He recently took over the plant of the Oswego Milling Company which he leased in July and will manage both with O. M. Crain in charge.

The Farmers Elevator Company of Troy, Mo., has decided to rebuild an elevator and warehouse on the site of the elevator which burned recently. Work on the warehouse will begin in the near future and the elevator will be constructed next spring.

The Grangers Co-operative Association, of which A. Carr is manager, has leased the Black Elevator at Lebo, Kan. The elevator has been operated under lease by J. L. Jones who has now gone to Buffalo, N. Y., where he has taken charge of a feed mixing plant.

The Butler Elevator of the Peoples Elevator Company, which operates at Butler, Rich Hill and Metz, Mo., has been sold to the Farmers Grain Elevator Company, which will operate it in connection with its own business at Butler. Frank Holland will be manager.

A tray elevator and belt conveyor system is to be installed in the warehouse of the Radial Warehouse Company of North Kansas City, Mo. The additional equipment will facilitate the handling of flour and feed and will necessitate the erection of part of another floor to the large warehouse.

The Davidson Mill & Elevator Company has taken over the plant at Kansas City, Mo., formerly operated by the United States Feed Mills Company. The plant has storage capacity of 300 cars millfeed, and 60,000 bushels grain and will be used in milling complete line of molasses and dairy feeds.

The elevator at Berea, Neb., formerly owned by the Barker Bros., has been sold to the Deaver Grain Company of Lorenzo, Colo. The new owners are Stephen and George Deaver. The former will be in charge. F. A. Barker, who has been managing the concern will remain with the new owners for some time.

The capacity of the Wichita Terminal Elevator Company of Wichita, Kan., is to be increased by the erection of a 300,000-bushel annex. The contract for the work has been let to the John S. Metcalf Company of Chicago. The addition will consist of 15 reinforced concrete tanks of the same type as the 27 now in use, and 10 smaller bins.

George Nueswanger's new cribbed elevator at Alliance, Neb., has been completed. The house was fitted for handling all kinds of grain and seeds and for cleaning and grinding. In addition to the elevator, there is a large warehouse used for storing feed and merchandise of different kinds. The warehouse is equipped with an electrically operated freight elevator with capacity of 2,000 pounds.

SOUTHERN AND SOUTHWESTERN

The grain and feed store at Foraker, Okla., has been bought by the Harris Grain Company.

The elevator of the Clark-Lynn Grain Company at Texarkana, Ark., which burned is to be rebuilt.

After a long period of idleness, the Dewey Mill & Grain Company of Dewey, Okla., has been put into operation.

R. G. Sieber, C. A. Polson and others have incorporated at Oklahoma City, Okla., as the Polson Grain Company.

The Gulf Grain Company of Houston, Texas, is now located in commodious quarters in the Merchants Exchange Building.

E. F. Edwards has sold his interest in the San Angelo Grain Company of San Angelo, Texas, to L. N. Cox Company of Barnhart.

The contract for building the Port Elevator at Houston, Texas, plans for which were drawn by the John S. Metcalf Company of Chicago, will be let on December 4.

Charles Evans has enlarged the storage and handling facilities of his plant at Chandler, Okla., where he handled grain, flour and feed, to accommodate an increased stock.

The Cash Grain & Seed Company composed of R. E. Montgomery and J. A. Darden has started in business at Clarksdale, Miss. The firm will handle grain, hay, feedstuffs and field seeds.

The Illinois Central Railroad has put its elevator "D" in operation for the benefit of the port at New Orleans, La. This follows an agreement between the railroad and Board of Commissioners.

The Board also entered into an agreement with the Texas & Pacific Railroad to the end that that road's two elevators are being operated for the account of the Dock Board.

A four-story mill, five-story elevator and large warehouse have been completed at Stuttgart, Ark., for the O'Donnell-Drager Rice Milling Company. The mill was put into operation late in October.

Articles of incorporation have been filed for the Wildorado Grain & Mercantile Company of Wildorado, Texas. G. B. Binford, H. H. Elam and Cleme Kellogg are interested. The firm is capitalized at \$10,000.

The Missouri Grain Company of St. Louis has bought the property of the Union City (Tenn.) Elevator Company. J. W. Jefferson will be manager of the new owner, and it is reported that the plant will be enlarged.

A branch store has been opened at Deland, Fla., for the Red Star Grain & Feed Company of Tampa, Fla., with A. G. Thomas as local manager. The store will handle grain, feed, flour, hay and provisions at wholesale and retail.

The Kimball Milling Company of Ft. Worth, Texas, has awarded the contract for 10 additional storage tanks with capacity of 250,000 bushels. The firm already has a 600,000-bushel elevator and a steel warehouse with capacity of 100,000 bushels.

The old Farrington Elevator at Chickasha, Okla., has been leased by the Linton Grain Company, whose elevator burned in July. F. R. Linton is manager of the company. The old elevator is being remodeled and will then be ready for receiving grain.

The Acker-McCain Company has bought the Anderson Grain & Grocery Company at Winnsboro, Texas. The principal stockholders are T. E. Acker, J. C. Beard and E. M. McCain of Winnsboro. The new firm will be incorporated with capital stock of \$25,000.

The Williams Grain & Produce Company was recently established at Magnolia, Ark., by M. E. Williams and associates, one of whom is George M. Johnson, former county farm agent at Magnolia. Flour and feed will be handled along with grain and produce.

The new 10,000-bushel elevator of P. A. Cope at Chattanooga, Okla., has been completed and is now receiving grain. The equipment includes automatic scale, ball bearing car loader, wagon and truck lift, disc separator, Fairbanks-Morse Oil Engine and ball bearing roller.

About 35,000 bushels of the storage capacity of the Plansifter Milling Company at Oklahoma City has been leased by the Acme Milling Company. It was secured from the Enterprise Seed Company that leased the entire milling and elevator plant from Frank Buttram, Oklahoma oil operator.

A new company was organized at Waynesville, Ga., under the name of the Burke County Milling & Marketing Company to operate the elevator which was bought by Sidney Bates. S. B. Bates, J. F. McElmurray, John L. Boyd, Edgar Barger and W. M. Fulcher are interested in the company, which is capitalized at \$8,000.

J. R. Hale & Sons, cotton and grain dealers of Nashville, Tenn., are building a 400,000-bushel concrete storage house in connection with their present elevator. The John S. Metcalf Company of Chicago is the consulting and supervising engineers on the work. Along with the new storage house, the company is installing an oat purifier and corn drier.

OHIO AND MICHIGAN

The new elevator of the Krugh Bros. Grain Company of Ohio City, Ohio, is in operation.

A grain drier is being added to the equipment of the elevator of Fred Kalmbach at North Baltimore, Ohio.

On November 1, the Kirkwood Grain & Supply Company of Kirkwood (Sidney p. o.), Ohio, discontinued business.

Charles H. Peever succeeds Carl D. Romick as manager of the Arlington Elevator & Supply Company at Arlington, Ohio.

The Taft elevator, coal yards and warehouse of the late James O. Taft, at Howell, Mich., have been bought by John Wriggelsworth.

W. B. Dean has bought an elevator at Cohoctah, Mich., and will operate it. He was for several years manager of the Mason Elevator Company.

The E. A. Rutherford Elevator at Sheridan, Mich., has been bought by Charles O. Burgess who also operates elevators at Sheridan, Stanton and Sidney.

The Cass City Grain Company has bought the two elevators of J. E. Martindale, the Pinconning Elevator and the Pine River Elevator, near Standish, Mich.

The Cleveland Grain & Milling Company of Cleveland, Ohio, has acquired the Federal Mill & Elevator Company's transfer and cleaning elevator at Mansfield, Ohio. The elevator has a capacity of 750,000 bushels and is in fine condition. This

is the house that was formerly owned and operated by H. L. Goemann. The transfer was made through S. T. Edwards & Co., feed plant engineers of Chicago.

A modern oil engine has been installed in the co-operative elevator and mill at Hastings, Mich., this summer. Other changes were also made to the property.

The Dundee and Azalia, Mich., elevators of the Michigan Milling Company have been bought by the Karner Bros. & Keinath who are completing plans for the enlargement of the Dundee plant.

Edward H. Hess, H. C. Fox, Henry Bonnebaum, Jr., H. J. Clarke and Walter D. Myers have incorporated at Montezuma, Ohio, as the Montezuma Grain Company. Its capital stock is \$10,000.

The grinding department of the Conover Grain Company, Conover, Ohio, is being remodeled and new equipment is to be installed, including a Bauer Attrition Mill, cob crusher, elevators, bagger and transmission.

J. W. Simmons of Pemberton, Ohio, is remodeling his elevator at Pemberton, Ohio. Addition to the office will be built, the side track moved and machinery, including a 20-inch Bauer Ball Bearing Attrition Mill, installed.

The elevator at Brent Creek (Flushing p. o.), Mich., recently bought by the Chatterton & Son of Lansing, Mich., from the Brent Creek Farmers Co-operative Elevator Company is to be managed by Alfred Philips of Flushing. The house was placed in operation after a few repairs were made.

CANADA

The Chalmers Milling Company, Ltd., of Toronto, Ont., has been incorporated to carry on a grain elevator business, etc., capitalized at \$40,000. The

provisional directors are A. Chalmers, S. A. Seeds and H. P. Phillips.

J. H. Duckett has been appointed chief superintendent of the Saskatchewan Co-operative Elevator Company, Regina, Sask.

It is believed that the Columbia Grain Elevator Company will erect a grain elevator at Port Mann, above New Westminster, B. C.

An additional dust collecting system has been installed by the Cyclone Blow Pipe Company in the Grand Trunk Elevator at Fort William, Ont.

A grain elevator is to be built for the Canadian Government at Prince Rupert, B. C. An appropriation of \$150,000 has been made for this purpose.

W. A. Henderson is to be superintendent of the new Spillers Elevator at Vancouver, B. C. He was for years elevator manager for the Robin Hood Mills.

The Northwestern Elevator Company, Fort William, Ont., whose elevator was destroyed by fire, has leased the Davidson & Smith Elevator at Port Arthur, Ont.

The Robin Hood Mills of Calgary, Alta., have their new grain bins ready for operation. They have a capacity of 370,000 bushels, which will make the mill's total capacity 620,000 bushels.

The Reliance Elevator at Port Arthur, Ont., has just installed a new dust collecting system including 15 cyclone dust collectors and an auxiliary fan system supplied by the Cyclone Blow Pipe Company of Chicago, Ill.

C. S. Langille has been appointed as manager of the Terminal Elevator of the Canadian Co-operative Wheat Producers at Fort William, Ont., who are selling agents for the wheat pools of the three western provinces.

FIRES—CASUALTIES

Harbine, Neb.—The Wright Lee Elevator burned with a loss amounting to \$9,000.

Mt. Vernon, Wash.—Fire damaged the property of the City Grain & Seed Company.

Brodhead, Ky.—A small loss from unknown cause was sustained by J. H. Laswell & Co.

Lothair, Mont.—The International Elevator and 14,000 bushels of wheat burned recently.

Voltaire, N. D.—On October 20, fire destroyed the elevator of the Voltaire Farmers Elevator Company.

Sylvan Grove, Kan.—Fire destroyed the Cross Elevator together with approximately 6,000 bushels of wheat.

Greenwald, Minn.—Lightning damaged slightly the elevator operated by the Greenwald Elevator Company.

Raymond, Mont.—Fire destroyed completely the elevator of the Equity Co-operative Association at this station.

Owosso, Mich.—The hay shed at the property of the Farmers Co-operative Elevator Company burned on October 9.

Toronto, S. D.—Lightning did slight damage to the elevator of the Farmers Co-operative Company on September 26.

Minneapolis, Minn.—The Martin Elevator of the Brooks Elevator Company was damaged slightly by fire on October 8.

Funk's Grove (McLean p. o.), Ill.—Lightning set fire to the elevator of the Funk's Grove Grain Company on October 3.

Pittsburgh, Pa.—The grain elevator and buildings of the Dwight Hamlin Company, Inc., was destroyed by fire on November 4.

Gypsum City, Kan.—Exposing fire was the cause of slight damage to the elevator of the Morrison Grain Company on October 2.

Windfall, Ind.—The elevator of the Windfall Grain Company was totally destroyed by fire of unknown origin on October 24.

Danville, Ky.—The plant of Mitchell & Smith, grain, feed and coal dealers here, burned with a loss of \$8,000 on November 3.

Pisek, N. D.—Fire destroyed the elevator of the Lybeck Grain Company with a loss of \$10,000. The loss was covered by insurance.

Morganville, Clay County, Kan.—A small loss occurred in the elevator of Anton E. Peterson on October 15. The cause is unknown.

Nolin, Ore.—Fire damaged the warehouse and elevator of H. W. Collins with a loss of \$90,000. Most of the grain was insured.

Rolfe, Iowa.—Fire destroyed the elevator here of the Hoffert-Grove Elevator Company with 1,400

bushels corn, 7,000 bushels oats, considerable coal and some machinery. The loss is partly covered by insurance.

Conway, Ark.—Fire destroyed the Jones Milling Company's grain and hay warehouse with a loss of \$3,000 on building and contents.

Paragould, Ark.—The detached warehouse of the House-Kamp Grain Company was destroyed by fire of unknown cause on November 6.

Springfield, Mass.—The coal pocket, grain warehouse and sheds of the Indian Orchard Grain Company burned with loss of about \$35,000.

New Iberia, La.—Fire destroyed the Bergerie & Voorhies Cotton Gin and the New Iberia Grain Company's building with a loss of \$100,000.

Memphis, Mo.—Fire destroyed the Gorin Elevator owned by Joe Bertram. The fire began in the wheat which is supposed to have been overheated.

Kerbey (mail Owosso), Mich.—Fire destroyed the Arthur Codd Company's grain elevator. Fire is said to have been started by safe blowers.

Texarkana, Texas.—Fire damaged the grain and produce establishment of Barker & Young with a loss of \$3,000. The fire was of unknown origin.

Cairo, Ill.—The Lynch Grain Elevator was destroyed by fire with a loss of \$120,000. The elevator was filled to capacity with oats at the time.

Gray, Alta.—Fire destroyed on October 21 the grain elevator of the Province Grain Company with 15,000 bushels wheat. The loss amounted to \$30,000.

Hartford, Ark.—The building and stock of the Hartford Flour, Seed & Grain Company were destroyed by fire of unknown origin with a loss of \$5,000.

McGregor, Texas.—An almost total loss by fire of unknown origin was sustained on the warehouse of the McGregor Milling & Grain Company on November 6.

Thompson, near Union Springs, Ala.—Fire destroyed the large seed house of the J. M. Ellis Sons Company with 60 tons cottonseed and 15 carloads of hay.

Grand Ledge, Mich.—The elevator of the Grand Ledge Produce & Supply Company was slightly damaged by fire on October 30. The cause of the fire is unknown.

Tulia, Texas.—Fire destroyed the old elevator of the Farmers Grain Company here on October 12. The company was adding a warehouse to its elevator at the time.

Kansas City, Mo.—Fire destroyed the warehouse and its contents of the Ryan Coal & Grain Company with a loss of \$18,500. J. E. Ryan is secretary and manager of the property.

Superior, Wis.—Old Elevator T was destroyed on October 28 by fire caused by sparks from locomotive.

Loss \$25,000 partly covered by insurance. No grain had been stored in the house for four years. The Harper Agency of Superior was local representative.

Philadelphia, Pa.—The warehouse of the Kensington Markets was destroyed by fire together with several hundred tons of hay, grain and feed. The loss amounted to \$50,000.

Kief, N. D.—Fire destroyed the elevator of the Kief Grain Company. The elevator contained 15,000 bushels wheat and 5,000 bushels rye, most of which was covered by insurance.

Parshall, N. D.—Fire destroyed the Farmers Elevator here with 70,000 bushels grain and a loss of \$40,000. Elevator and grain covered by insurance. Cause of fire is unknown.

Denver, Colo.—Fire damaged slightly the property of the Colorado Milling & Elevator Company on October 15. The fire was caused by the friction of a pulley on metal spout.

Pleasantville, Iowa.—Fire destroyed the S. E. Garrett Grain Elevator with 8,000 bushels grain. The fire was of unknown origin and the loss is partly covered by insurance.

Sioux City, Iowa.—The wholesale and retail hay and feed establishment of the Gard Bros., of which

Frank J. Gard is president, burned with a loss of \$40,000. The firm will rebuild the house, it is said, in the near future.

Edmonton, Alta.—Fire damaged the elevator and mill of the Northern Seed Company, Ltd. The plant was one of the city's earliest enterprises, having been erected 20 years ago.

Plano, Texas.—The hay warehouse of the Hughston Grain Company was destroyed together with contents by fire of unknown origin. The loss amounted to \$6,000, with \$2,000 insurance.

Reading, Minn.—One of the Farmers Elevator Company's warehouses burned with a loss of \$4,000 to \$5,000, with \$4,000 insurance. The elevator was operated under lease by C. W. Derr of Mitchell, S. D.

Sedalia, Mo.—A dust explosion wrecked several grain elevators here with a loss of \$60,000. The loss to the Farmers elevator was \$35,000; the Grider Elevator Company, \$20,000, and the Morris Grain Company, \$800.

Cokato, Minn.—Fire destroyed the Cokato Farmers Elevator and more than 5,000 bushels of grain. The fire was of unknown origin. The structure was fully covered by insurance. The elevator will not be rebuilt.

OBITUARY

ALDRICH.—Duane Aldrich was killed on October 28 when a stack of flour sacks toppled over on him. He was manager of the Montana Elevator Company's plant at Suffolk, Mont. He was 33 years old.

ANDREWS.—R. B. Andrews for 44 years in the grain business at Macon, Ill., died aged 66 years. He sold his interests in 1919.

ASPEGREN.—John Aspegren, well known on the New York Produce Exchange and especially in the cottonseed oil trade, died recently, aged 49 years, at his home in New York City. Mr. Aspegren was well known in virtually all commercial markets, but especially among handlers of cotton and cottonseed products throughout the South. He had been president of the New York Produce Exchange.

BLAKESLEE.—George Smith Blakeslee, founder of the firm of G. S. Blakeslee & Co., and a member of the Chicago Board of Trade since 1875 and at one time very active in the hay business, died at his home in Oak Park, Ill., aged 75 years. Heart failure caused his death. His widow and one son survive him.

BRINGLE.—Milton B. Bringle died recently from heart trouble. He was 57 years old and a prominent business man of Orleans, Ind., and a member of the feed and coal firm of Bringle & Johnson.

BROCKMAN.—Arthur Brockman died recently at St. Louis, Mo. He was for years a prominent member of the Merchants Exchange and prior to his retirement from the grain business had been associated with Frank McClelland.

CARMODY.—George A. Carmody died after a sudden illness diagnosed by physicians as infantile paralysis. For many years, Mr. Carmody was one of the best known grain operators in the North Pacific territory and lived at Seattle, Wash. His widow and three children survive him. He joined the Kerr-Clifford Exporting Company in 1896 and in 1908 was appointed to represent and be manager of the Seattle offices. A year ago the company closed its Seattle branch and Mr. Carmody worked in the domestic trade on his own behalf in connection with the Tomlinson Grain Company.

CARNEY.—James S. Carney died on October 17 at New York City. He was one of the most widely known members of the Produce Exchange and was a director of the Standard Milling Company and the Hecker-Jones-Jewell Milling Company. He had been a member of the exchange for 50 years.

CHANDLER.—George W. Chandler died in New York recently. He had been a member of the Milwaukee Chamber of Commerce since 1866. He was a member of the Chandler Brown Company, one of the largest of the grain receiving concerns of the 70's and 80's with a branch in Chicago. The company went out of business in 1888 when it was absorbed by Lamson Bros. & Co.

COUCH.—William R. Couch died from heart trouble aged 50 years. He had been in the grain business in the employ of the Northern Grain & Warehouse Company, and Strauss & Co., for 19 years, most of the time at Garfield, Wash.

CROWE.—G. R. Crowe, who died recently at Winnipeg, was one of the outstanding pioneers of the Prairie Provinces, being the founder of the Winnipeg Grain Exchange. He moved to Winnipeg from Nova Scotia in 1879; in 1890 he entered the grain trade from which he retired only four years ago.

He was always an active figure in grain shipping and export trade and was president of the British Empire Grain Company, Ltd., and president of the Northern Elevator Company, Ltd.

DEWEY.—Paul Dewey, a traveling hay buyer for Toberman & Mackey, St. Louis, Mo., died recently from typhoid fever.

DURBIN.—George W. Durbin died on October 6 after a short illness. He was assistant weigher for the Chamber of Commerce for 35 years at Milwaukee, Wis.

ELLIOTT.—C. M. Elliott, manager of the Alberta Grain Pool, died recently at Vancouver, B. C.

GAZET.—John Gazet, a prominent grain elevator man of Minnesota, died, aged 63 years, at Rice, Minn., from heart trouble.

HENSLOW.—George Henslow, for years in the grain business around Indian Head, Sask., died recently.

HOLMES.—Jesse H. Holmes, formerly a member of the St. Louis Merchants Exchange, and manager and secretary of the Chase Bag Company of St. Louis, Mo., for years, died of heart trouble at Boulder, Colo., aged 81 years. He retired from active business in 1910.

KIBLER.—Phil Kibler, a prominent grain dealer of Cissna Park, Ill., died after undergoing an operation at the Mayo Bros. Hospital.

KRAATZ.—H. J. Kraatz, for six years statistician for the St. Louis Merchants Exchange, died at St. Louis after an extended illness. He was forced to retire in August because of ill health.

MCGRADY.—W. B. McGrady died on October 30 at Pittsburgh, Pa. He was chief of the Bureau of Standards of Pennsylvania which bureau deals with weights and measures, and was widely known to flour and grain dealers.

MEYER.—George H. Meyer died after five days' illness from pneumonia. He was president of the

George J. Meyer Malt & Grain Corporation of Buffalo, N. Y. He became head of the grain corporation five years ago following the death of his father, the founder of the firm. His widow and three children survive him.

MOYER.—William O. Moyer, formerly operator of grain elevators at Kemp, and Chesterville, Ill., died on September 26.

ORTHWEIN.—C. C. Orthwein died at Los Angeles, Calif., on October 21 from heart trouble. He was at one time one of the largest grain dealers at Kansas City, Mo.

PACKARD.—Orrin E. Packard, owner of the grain elevator and mill at Charlotte, Mich., died recently.

PARSONS.—Nels Parsons, a pioneer Omaha, Neb., hay commission merchant, died on November 7, from apoplexy. He was one of the organizers of the Omaha Hay Exchange and was its president twice.

SAGER.—Hiram N. Sager died on October 29 at Chicago, Ill. He was for 40 years a member of the Chicago Board of Trade and was its president in 1907 and 1908. Further details concerning his life are to be found in the "Terminal Markets" Department.

SANDERS.—George Sanders, proprietor of a flour and feed store at Butte, Neb., died recently.

SLICK.—Lincoln E. Slick, a grain dealer of Peoria, Ill., died at Los Angeles, Calif., where he had gone for his health. He was engaged in the grain business at Bloomington 18 years ago and later bought the old Hungarian Roller Mills. His widow and daughter survive him.

SOWLE.—Luther T. Sowle, a grain dealer of Minneapolis and a member of the Chamber of Commerce for 40 years, died recently. His daughter and four sons survive him.

TALBOTT.—Edward R. Talbott died at his home in Springfield, Ill., on November 1 after a short illness, aged 70 years. He had been actively engaged in the grain trade for 40 years at Springfield. He leaves his widow and one daughter.

TUTTLE.—William Pierce Tuttle died on October 12. He was one of the oldest members of the Chicago Board of Trade and for the past 45 years was very active on it.

VIEHMAN.—George J. Viehman died aged 62 years, after a long illness. He was president of the Viehman Grain Company of Minneapolis, Minn., and had been in the grain business for more than 20 years. He was with the W. P. Devereaux Company previous to the organization of the Viehman Company.

WALLACE.—Henry C. Wallace died recently from toxemia poisoning. He had been United States Secretary of Agriculture since the beginning of the Harding administration.

WARE.—James Ware, a well known grain dealer, died suddenly at Mound Valley, Kan. He was in business at Altamont, Kan.

WEGNER.—John W. Wegner, manager of the Pyle & Kern Elevator at Lockwood, Mo., for four years, died recently.

WOLFERSBERGER.—John Wolfersberger died at his home in Minneapolis, Kan., on October 21 from gunshot wounds, which he received accidentally. He was a prominent grain man and owned elevators at Minneapolis, Lindsey and Brewer. He was 47 years old and is survived by his widow and four children.

WOOLLEY.—Andrew C. Woolley, president of A. C. Woolley & Co., grain dealers of Atlanta, Ga., died on November 4. He had been in the grain and hay business for 30 years.

FIELD SEEDS

WHOLESALE GRASS SEED MEN MEET

The Wholesale Grass Seed Dealers Association held its mid-winter meeting at Chicago, November 10 and 11. The meetings were well attended and particular attention was given during sessions to seed legislation and to the international seed trade rules.

SUNFLOWER SEED PRODUCTION SMALL

The production of sunflower seed in Missouri, Illinois and California is estimated at about 8,300,000 pounds compared with upward of 13,000,000 pounds in 1923, says the Department of Agriculture. These three states produce 95 per cent of the total crop of the United States, and the considerable reduction in production is due, the Department says, to decrease in acreage. Drought in heavy produc-

ing districts of the three states also cut down yields materially, and in Missouri and in the San Joaquin Valley of California, the yields averaged only about 500 pounds per acre.

NEW VALUE IN SEED CLEANING

That the thorough cleaning of seed may be of advantage in addition to its value in controlling weeds has been shown in recent investigations by the United States Department of Agriculture. While studying in some of the Alfalfa and Clover regions of the Northwest certain stem diseases of these crops caused by nemas, organisms doing great damage to many farm and garden crops, it was found that some of the minute parasites adhere to the seeds, and in that way may be introduced into new fields or into other parts of the country.

It was learned that the first cleaning did not remove the infection and that recleaning could not

be depended upon to remove the danger. However, when seed of these crops was recleaned a second time, making three cleanings in all, practically all the organisms were scoured off.

Dr. N. A. Cobb, in charge of the nema investigations being carried on by the Department, thinks these results are an indication that great thoroughness in cleaning seed may bring large returns in reducing the extent of various plant diseases. It is evident, in the light of these results, that from now on farmers should consider the cleaning of seed as having a much greater value than the mere removal of weed seeds along with those of low viability.

THE ILLINOIS SEED LABORATORY

The producer of farm seeds having a surplus will seek a market for same and naturally he will look to his locality for customers first. Usually the home grown seed is preferred because the buyer feels that he knows what quality of seed has been produced,

ages of weed seeds and inert matter, also the noxious weed seed content is necessary.

The analysis of seed under any seed law is shown on a label or tag and this has resulted in the term "label law" being used. The object of this label or tag is to display on each lot sold or offered for sale in lots exceeding one to ten pounds, the analysis of the seed, thus, giving the purchaser an opportunity to see the quality of the seed before buying.

If the label or tag shows the presence of noxious weeds he will very likely not want the seed at any price, whereas, if the seed was not tagged with the analysis he no doubt would buy and get the noxious weeds without knowing it. The seed law in this way is a protection to the farmer but still there are a few who disregard this information entirely and pay no attention to the quality of the seed which they are buying.

Some seed laws do not prohibit the sale of any seed when tagged with the analysis while others provide that seed containing noxious weeds in

substance or substances, which will add to the weight or quantity of any such farm seeds.

Corn sold for seeding purposes within the state must be tagged with the common name of the variety, the year grown and the county and state where grown.

Any violation of the law is punishable by a fine of not less than \$5 nor more than \$100.

Under the Illinois Seed Law the State Department of Agriculture has established a seed laboratory at Springfield where any individual, firm or corporation can have samples of seed analyzed. This service is free to residents of the state on five samples each year between July 1 and June 30. When samples in excess of five free are submitted a fee of 50 cents is charged for Clovers and Timothy and \$1 for the chaffy grasses such as Kentucky Bluegrass and Orchard Grass.

Samples submitted for analysis should always be taken from recleaned seed and as fully representative of the entire lot as possible. The amount required is two ounces or half a drinking glassful.

To insure safety of delivery, samples should be sent in strong manila paper seed packets or small cotton bags. The name and address of sender should be written on a slip of paper and put inside the container with the seed. The package or sack should be addressed to the Division of Seed Inspection, Springfield, Ill., and the correct postage put on. In cases where a letter is being sent with the sample of seed, but under first class postage, a notation should be put on the package of seed saying "see letter" giving date, this will enable the Chief Seed Analyst, Albert C. Wilson, to check up samples and letters.

As samples are received, each is given a number and each is handled separately, thoroughly mixed and divided to get the required quantity for analysis. For small seeds this amount is two grams, for the Clovers, five grams. Separations are made by expert analysts with magnifying glasses into pure seed, weed seeds, inert matter and other crop seeds. These separations are weighed on torsion balances and the percentages of each determined for the tag which accompanies each lot of seed offered for sale. If there are noxious weeds present, the total number is determined by count and the crop seeds figured by use of a standard table which gives the number of crop seeds per ounce.

The Illinois Seed Law does not exempt farmers from its provisions, therefore, all farmers in this state having seed to sell to their neighbors are required to send samples to Springfield for analysis. The reports on all samples are made promptly, usually the same day as received, and if seed is salable for seeding purposes the report will show how the tag should be filled out.

If the sample is found to contain more noxious weeds than the law will allow, the report will be stamped "unsalable for seeding purposes." Such seed can be sold as uncleaned seed to dealers who have facilities for properly recleaning.

In some states the seed law exempts the farmer and this is hardly fair to the seed dealer because by not having to tag his seed the farmer can sell to his neighbor a lower quality of seed than the dealer. By requiring all seed to be tagged whether sold by farmer or dealer it gives the purchaser the



Conference with Inspectors

whereas, if buying from a dealer at some distance, he is not sure of the origin of the seed.

Owing to the fact that there are more consumers than producers the problem confronting the average farmer is where to buy seed which can be depended upon to give the best results. In the large producing centers, seed can usually be bought at a lower price, therefore, there is a tendency for farmers to purchase where they can save money. The desire to save money in the purchase of seeds is often false economy because very frequently the lower priced seed contains weed seeds which are detrimental

greater numbers than allowed by the provisions of the law is unsalable for seeding purposes.

The Illinois Seed Law was passed by the 51st General Assembly and became effective July 1, 1919. This law governs the sale of the following farm seeds, Red Clover, Mammoth Clover, White Clover, Alsike Clover, Sweet Clover, Alfalfa, Timothy, Kentucky Bluegrass, Brome Grass, Orchard Grass, Meadow Fescue, oat grass, rye grass, vetch, rape, corn and millets.

These farm seeds cannot be sold if they contain noxious weed seeds such as Canada thistle, quack



Analyzing samples in Laboratory



Receiving, Mixing and Weighing samples for analysis.

to the farm and the crop produced, consequently, any saving in the purchase price is more than consumed by the loss and damage caused by the weeds.

To protect the farmer in his purchase of farm seeds, it was found necessary to enact seed laws in the different states.

These seed laws in most cases require seed dealers to give certain specified information regarding the quality of their seed. In some states the percentages of purity and germination are required while in others the purity analysis showing the percent-

grass, Clover dodder, Alfalfa dodder, field dodder, wild mustard or wild carrot in greater numbers in the aggregate of any individual lot than 1 to 1,000 of crop seeds.

If Buckhorn, field sorrel, curled dock, ox-eye daisy or corn cockle are present in greater numbers than 1 to 500 the seed represented by the sample would be unsalable for seeding purposes.

It is unlawful to sell any seed whether mentioned in the seed law or not which is found to be artificially loaded or weighted with sand, dirt, or other

opportunity to see the quality of the seed before buying and as only salable seed can be tagged it will keep off the market any low grade seed which might otherwise be sold for seeding purposes.

The Division of Plant Industry of the U. S. Department of Agriculture at Washington has charge of the enforcement of the Seed Importation Act. This act controls the quality of seed imported from foreign countries and prevents entry into the country of large quantities of seed containing weed seeds. Sometimes the seed is recleaned at the port

of entry and all which meets the requirements of the act is permitted entry. Red Clover containing more than 3 per cent of yellow trefoil or other seeds of similar appearance but of lower value will be considered adulterated and will be refused entry until put in condition to pass the requirements of the Federal Seed Importation Act.

Further information regarding this act can be obtained by writing to the Seed Laboratory, Washington, D. C. Any information wished regarding the state seed laws can be obtained by writing to the various state Departments of Agriculture or experiment stations.

IN CHARGE OF SEED LAB.

Dr. L. W. Durrell has been appointed head of the Department of Botany at the Colorado Agricultural College, and botanist in charge of Colorado State Seed Laboratory. He was former assistant professor of plant pathology at Iowa State College.

SEED CERTIFICATION IN NEW YORK

The New York State Seed Certification Association, co-operating with the plant breeding department of the Cornell University, is making tests on all kinds of seeds in that state. Members of the Association have also prepared a number of exhibits at state and county fairs.

CHART OF STATE SEED LAWS

Seed dealers and shippers will be much interested in the complete and concise chart summarizing the various state seed laws, which has been worked out by students in the Non-Collegiate Course at the Iowa Agricultural College at Ames, Iowa, under J. C. Cunningham.

Blue prints have been made of the chart, and these are selling for 25 cents, the cost of making them. Anyone interested in securing a copy should get in touch with J. C. Cunningham, Chairman Non-Collegiate Courses, Iowa State Agricultural College, Ames, Iowa.

IMPORTS OF FORAGE PLANT SEEDS

The Seed Laboratory of the Bureau of Plant Industry reports the following imports of forage plant seeds permitted entry into the United States under the Seed Importation Act.

Kind of seed	October		July 1, '24 July 1, '23	
	1924	1923	to Oct. 31, '24	to Oct. 31, '23
Alfalfa	38,800	638,800	3,000,200	3,487,500
Alsike clover.....	1,256,500	2,831,900	2,083,900	4,861,100
Canada bluegrass...	41,300	46,700	51,900	68,600
Crimson clover....	139,600	631,000	3,055,500	5,429,400
Red clover	74,100	49,000	239,700	49,000
White clover	104,900	178,500	287,200	291,600
Clover mixtures ..	7,100	15,700	7,100	18,300
Meadow fescue ..	500	.....	500	100
Grass mixture ..	.....	.....	100	100
Broom-corn millet.	11,000	49,500	42,100	149,500
Orchard grass.....(2)	218,400	315,400	316,100	328,600
Rape	692,000	1,590,600	1,031,600	2,110,100
English ryegrass ..(4)	59,000	170,300	403,800	408,600
Italian ryegrass....(5)	226,600	280,500	369,700	368,800
Hairy vetch	134,100	312,800	754,000	502,200
Spring vetch	309,000	22,000	556,800	444,700
Timothy .....	.....	.....	100	.....

The Seed Laboratory of the Bureau of Plant Industry reports the following imports of forage plant seeds not subject to the Seed Importation Act:

Bentgrass	28,700	15,900	61,100	37,100
Biennial white-flowered sweet clover	23,400	215,400	290,800	25,100
Biennial yellow-flowered sweet clover	.....	.....	11,000	.....
Crested dog's tail ..	.....	200	8,900	6,700
Chewing fescue ..	46,300	45,300	471,000	529,400
Other fescues	94,400	111,000	268,300	157,700
Rescue grass .....	.....	.....	.....	1,500
Rhodes grass .....	.....	4,000	2,300	6,200
Rough-s t a l k e d meadow grass....	.....	3,300	2,200	3,300
Serradella	200	.....	200	.....
Sweet vernal grass.	100	.....	100	300
Tall paspalum .....	.....	.....	4,500	4,400
Velvet grass .....	.....	8,100	.....	19,400
Wood Meadow grass	1,100	.....	1,100	.....
Yarrow .....	.....	.....	.....	500

(1) 78,700 pounds from Germany; 3,500 pounds from Hungary; 9,800 pounds from Poland.

(2) All from Denmark. (3) All from Holland, except 77,000 pounds from Germany.

(4) All from Ireland, except 12,200 pounds from Great Britain. (5) 98,300 pounds from France; 78,600 pounds from Holland; 55,100 pounds from Argentina; 34,200 pounds from Ireland; 15,500 pounds from Scotland. (6) All from Germany, except 32,500 pounds from Czechoslovakia. (7) From Holland, except 44,000 pounds from Germany.

SEED STRONG AT TOLEDO

In their market letter of November 8, Southworth & Co., Toledo, Ohio, say:

Clover seed ruled strong and sharply higher this week. Offerings were light, although they increased on the advance. Looks like good demand for all futures around \$18 and below. The short interest is mostly in the way of hedges by cash houses and interior dealers against purchases of cash seed and Clover carried over from last season. Brisk cash demand does not develop until after the first of the year. Last year total shipments after that period were 20,500 bags; two years ago 37,000 bags; three years ago 39,000 bags. Receipts this week 526 bags; total season to date 2,852 bags compared with 3,901 last year. Prime inspected this week

250 bags; season to date 1,000 bags. U. S. Department of Agriculture in their report state the movement of Red Clover seed continued to lag behind that of last year, but Alsike movement up to the latter part of October was abreast of that of last year. Approximately 25 per cent of the Red Clover and 55 per cent of the Alsike had left growers hands by that date. Farmers have not been selling freely because they anticipate higher prices due to smaller commercial supplies of these seeds in this country, Canada and Europe, than last year. The quality of both Red and Alsike Clover although quite variable, being better in some countries and poorer in others, averages slightly better than that of the 1923 crop.

Both Alsike and Timothy also strong and higher. Offerings dried up on the recent decline. There was some fresh investment demand and short covering. Trade more active. Receipts of Alsike this week 197 bags. Receipts of Timothy 361 bags. Prime Timothy inspected this week 350 bags; season to date 4,564 bags. New York reports exports 2,330 bags and Baltimore 150 bags.

SEALING ALFALFA SEED BY MONTANA SEED GROWERS

In Montana at the present time there are two distinct sealing systems in operation. First: Sealing of Montana grown Alfalfa, no guarantee as to variety implied. This system of sealing was inaugurated by the Department of Agriculture to protect the name and reputation of Montana grown seed. It is not compulsory but it protects the seedsmen who are handling genuine Montana grown seed from the competition of unscrupulous seedsmen who offer seed grown elsewhere as the Montana product. The consumer knows that he is getting the genuine Montana product in case the bag carries the Montana seal.

Second: Sealing of pedigreed hardy Alfalfa of the Grim and Cossack varieties. This work is done under the direction of the Montana Seed Growers Association co-operating with the Montana State College. Such seed is sealed only after pedigree of the fields has been established, fields have been inspected and seed passed on by the association. This seal not only means that the seed is grown in Montana but that it is genuine, true-to-name Grimm or Cossack as the case may be. Unsealed seed of hardy Alfalfa is uncertain seed and consumers all over the country are demanding sealed seed, as much so-called Grimm and Cossack being sold on the open market, supported by general statements or growers' affidavits is not true-to-name and farmers are not getting the results to be expected from the hardy Alfalfas. This system of sealing and inspection is quiet similar to that employed in some other states, such as Idaho.

Neither of these plans is compulsory but is a protection to the man who is handling the genuine article who wants to avoid unjust competition of those who do not.—A. J. Ogaard, Secretary Montana Seed Growers Association.

TRADE LIMITED TO A FEW ITEMS IN NEW YORK SEED MARKET

By C. K. TRAFTON

There has been nothing like general animation in the local seeds market during the past month. The jobbing season was terminated somewhat rapidly because of the generally strong views of holders, although in some quarters a slightly easier tone prevailed at times as certain distributors who had carried over a fair surplus of some lines showed more eagerness to sell. As far as domestic trade was concerned, business was generally limited to a few items. Under the circumstances prices on most of the list remained nominally unchanged. Foreign varieties were generally firm owing to light stocks and the strength in producing markets where shippers were making little or no effort to sell in this market owing to readiness of buyers elsewhere to pay full prices. For a short time the export demand for Timothy was less active, but subsequently buying for shipment to Europe again became brisk, largely at the basis quoted a month ago: 7 to 7½ cents. Total exports for the month were about 17,185 bags compared with 2,875 in the previous month. There was a good demand also for Meadow Fescue, Bluegrass and Red Top, mainly for shipment to the United Kingdom. The exports were: 1,770 bags of Red Top, 2,250 bags of Meadow Fescue, and 260 bags of Bluegrass.

Red Clover was virtually ignored during the month, buyers generally turning their attention to other varieties owing to the prevailing strong attitude of Red Clover holders. While interior markets were slightly easier certain holders who had fair stocks of foreign seed were asking for bids, which gave the market a rather softer appearance temporarily. However, it was not known that any business was done below last month's basis—28 @ 30 cents duty-paid for foreign seed. In fact, other holders at times were asking 31 @ 32 cents. This was traceable to the light stocks, meager arrivals, only 580 bags, and the strength in foreign markets. While some small offers of English seed were reported at 27 @ 30 cents c. i. f., French ship-

pers sent only nominal quotations of 29 @ 30 cents. In fact, it was stated that France and Germany were still trying to buy here. A French authority stated that the crop was below the average in quantity and a large proportion was stained by rain. Stocks of the last crop are small and the huge demand from England, Hungary and Germany caused an advance of fully 90 per cent in prices. Sellers were scarce and predicted that prices would reach the 1919-1920 levels. Because of the bad conditions in Europe buyers showed more interest in Chilean Clover. Early in the month shippers claimed that British buyers were snapping up all arrivals, and hence they offered only small lots at 26 @ 28 cents c. i. f., while buyers were showing interest at 24 @ 25 cents. Subsequently the tone became slightly easier and some business was done at 24½ cents. Still later, the market again became firmer and sales were made at 25½ cents c. i. f.

Alsike was in better demand at times, partly because of the high prices current for Red Clover and partly owing to bad advices from Canada where it was said that the crop would be only 50 to 60 per cent of normal. Holders therefore became firmer, raising the first-hand basis to 18 @ 20 cents, against 17 @ 18½ cents a month ago. In fact, some jobbers quoted as high as 25 cents.

Crimson Clover was virtually ignored early in the month, but later buyers showed more interest in French seed for December-January shipment. However, they were not disposed to pay above 5 cents c. i. f. and as shippers generally asked 5½ cents little or no business resulted. The spot market was also inactive, but as stocks were light and arrivals meager; only 600 bags, against 2,840 in September, holders showed little anxiety to sell and the basis remains nominally unchanged—6½ @ 7½ cents duty-paid.

White Clover was in more active demand at various times during the month, largely because of the poor outcome in Wisconsin. Hence lawn grass mixers were showing more interest in foreign seed. As a consequence slightly larger arrivals—about 800 bags, against 365 in September—were well absorbed and prices held around last month's level—48@50 cents. European markets also remained steady and it was apparent that some shippers had over-sold as they claimed to be unable to make further offers. However, some business was done on a basis of 42@45 cents c.i.f. for old crop and 45@50 cents c.i.f. for new crop.

Alfalfa has been somewhat unsettled. The availability of good domestic seed at 19@21 cents served in some degree to check buying of the foreign variety, although buyers at times showed fair interest as the foreign seed was available at times at a discount of 2 to 3 cents, which was somewhat attractive to those seeking a substitute for the high priced Red Clover. At the same time, holders showed little or no eagerness to sell as arrivals were only 150 bags, all from Europe, and it was impossible to buy anything in Argentina where the spot basis was 16½@17½ cents.

Rye Grass was inactive on the spot and prices declined about ½ cent, or to 10@10½ cents. Arrivals were 1,430 bags, compared with 990 bags in September. In addition, it was found possible to bring seed from Oregon, about 940 bags arriving via the Panama Canal. Doubtless this served to offset the bad conditions in Great Britain, where the crop outturn was evidently extremely disappointing. As a result practically nothing was heard of firm offers, although there were some nominal quotations of 8½@8¾ cents. Moreover, more attention was paid to Argentine seed, moderate sales being reported at 6½@6¾ cents c.i.f.

Sweet Clover has moved somewhat more briskly as holders of liberal stocks became more anxious to sell. As a result the basis is now 14½@15 cents or 1 cent lower than a month ago.

NEW SEED TRADEMARK

The following new seed trademark was published in the October 21 issue of the *Official Gazette* of the United States Patent Office: "Excel Seeds" for

EXCEL SEEDS

vegetable, field and lawn grass seeds. H. A. Sholes & Co., Chicago, Ill. Filed August 14, 1924. Serial No. 201,416. Registered and published October 21, 1924.

SEEDS ACTIVE AT MILWAUKEE

By C. O. SKINROOD

Despite the large receipts of Clover seed at Milwaukee for the month of October, this trade apparently did not come to any surprising extent from Wisconsin. As the Department of Markets at Madison, Wis., says, there is a well defined tendency among Clover seed growers to hold their crop, although the price offered is the best in a number of years. The amount marketed up to this time is said to be exceptionally small, and far below the volume that had been sold a year ago.

The Department of Markets also reports that

Wisconsin will be one of the heavy producers both of Red Clover and of Alsike seed and that the returns from the crop will be the largest in many years.

As for yield the Department finds that the Clover acreage was somewhat larger than a year ago but that unfavorable weather conditions cut down the yields materially. The Department of Markets also reports that Wisconsin growers are being paid \$22.50 to \$26 a hundred for clean, desirable Clover seed, while Alsike prices offered on the farm range from \$15.25 to \$16.25.

Another crop report from the state says the second crop Clover stand was very heavy and very luxuriant, while the earlier headings were poorly filled. The late flowering fields, however, promise better filling and gave a better yield both in quality and quantity. New seedings of Clover planted with small grains, are reported as having made an exceptional stand of growth due to the heavy late summer rains. There will be some slight yield of seeds even from these new fields, which is very unusual.

This reporter says further that there will be an excellent market for Clover seed this year as Europe is short of seed while in 1923, Europe had had a large crop and had plenty of seed to ship to the United States. Wet, cold weather cut down the yields in Czecho-Slovakia, Hungary, Roumania, Germany and England. Italy, France and Poland, on the other hand, were said to have a pretty good crop of seeds. However, Europe is said by this Wisconsin man to have a carry-over of seeds of some importance, so that the old stocks may serve to some extent to offset the small yields this year. Nevertheless, the strong tone in the market leads to the predictions of very high prices for seeds this season unless Europe should spoil the mid-western market with unexpected large shipments.

Reports received by seed handlers in Milwaukee indicate that Utah has raised a very large crop of Alfalfa seed this year. Because of the tremendous demand for Alfalfa seed in Wisconsin and other states of the Northwest, this will be of particular interest. These reports show that Utah will turn out between 19,000,000 and 20,000,000 pounds of Alfalfa seed as compared with a yield of only about 13,500,000 pounds a year ago. High prices for seed a year ago and attractive returns, together with shortage of irrigation water, helped to bring about a larger acreage this season. The Utah reports received here also show that Alfalfa seed production of the country as a whole may be about one-third better than a year ago. Growers in Utah are getting from \$14.50 to \$16.50 per 100 pounds for choice Alfalfa seed. On the basis of these offering prices Utah farmers will get between \$2,900,000 and \$3,300,000 for their crop although many farmers are said to have declined these offering prices, according to local seedsmen. Like the Wisconsin Clover farmers, the Utah farmers also believe this is the season to get more money for their Alfalfa seed.

The Courteen Seed Company reports that the yield of Red Clover seed is very disappointing on the whole and that the prospects are for a genuine scarcity before the season is over. The quality of the seed; however, is reported as good in many instances. In general, an active and very firm seed market is looked for during the entire fall and winter season. The Courteen company reports that receipts of Clover seed have been at a very sat-

isfactory rate considering the short crop. The statement that farmers of Wisconsin are holding back and not letting go of their crop, because of the prices, is not given much credence as offerings have been of good volume up to this time.

The Courteen company quotes Red Clover around \$26 to \$30 for the choice quality. The Alsike is given a range of \$17 to \$21. White Clover is quoted from \$35 to \$42. The Timothy market is quotable from \$6.65 to \$7. Alfalfa rules mostly from \$17 to \$19, the Courteen company says.

The North American Seed Company reports receipts of Clover seed rather light for a number of reasons. Farmers are said to be very busy now with their corn picking, potato digging, etc., so that there is very little time to haul Clover seed to market. A little later when the rush fall work is done, much larger offerings of Red Clover are looked for. However, some farmers are holding back their seed, it is believed, in the thought of getting better prices.

The Alsike crop was also reported a small yield and there is some shortage in this field, the North American company believes. Alfalfa, on the other hand, now in the midst of the season's marketing, is reported to be plentiful, with seed also of good quality. The Alfalfa market is said to be about steady, in fact the supply in this quarter is considered more abundant than in any of the other main lines of seeds.

The general trend of the seed market is almost sure to be higher, the North American Company says. The only exception to that may be Alfalfa and this seed, too, is expected to rule strong in line with the bullish feeling in the seed market as a whole.

The North American company says Red Clover is being quoted all the way from \$27 to \$31. Alfalfa is selling mostly from \$18 to \$21 for the choice quality. The Timothy market is given a range of \$7 to \$7.50. White Clover sells largely from \$35 to \$48, depending on grade. The Alsike market is quoted from \$18 to \$21.

The Northland Seed Company has been organized at Sidney, Mont.

Bunter & Huber Company has organized at Jeffersonton, Ky., to conduct a seed house there.

The Elmwood Lumber & Grain Company of Elmwood, Wis., is to install seed cleaning machinery.

The E. G. Lewis Seed Company of Stronghurst, Ill., is repairing, painting and overhauling its buildings.

The Litchville Seed & Grain Company has succeeded the Litchville Feed Mill Company of Litchville, N. D.

A branch store has been opened at Leachville, Mo., for the R. F. Blaylock Seed Company of Blythedale, Mo.

J. B. Foley is president and Elmer Kuhn is general manager for the recently incorporated Gulf Coast Seed Company of Foley, Ala.

W. T. Reidy is now with the Wertz Seed Company of Sioux City, Iowa. The company recently installed new cleaning and grinding machinery.

A large seed plant and cotton gin have been added to the property of the Ferguson Seed Farms, Inc., of Sherman, Texas, at a cost of \$70,000. Additions are being made to their seed elevator for handling seed oats, seed wheat and seed corn. The company

is a consolidation of the Hughes Seed & Grain Company, A. M. Ferguson & Co., at Howe and the Plainville Seed & Gin Company of Plainville.

J. R. Eldridge, Maud Eldridge and G. W. Eldridge have incorporated at Oklahoma City, Okla., as the Enterprise Seed Company. The firm is capitalized at \$25,000.

J. A. Flanigan and Ross have organized at Ontario, Ore., as the Ontario Produce Company. New machinery has been installed to handle field seeds and grain.

Larger and more convenient quarters are now occupied by the Fort Collins Seed Company of Fort Collins, Colo. Many needed improvements have been made to the equipment.

A warehouse at Fort Wayne, Ind., has been bought by the Nathan & Wolf Company which has equipped the house with cleaning and handling machinery for seed and feed.

The Everett B. Clark Seed Company is building a kiln dry curing barn for the drying of seed corn at Milford, Conn. The structure will be able to handle 7,000 bushels in a single operation.

G. A. Chambers is now associated with the Nishna Valley Seed Company of Shenandoah, Iowa, in the capacity of general manager. He was formerly with the Sherman-Chambers Seed Company of Riverton, Iowa.

The property which the Pierce Seed & Produce Company of Pueblo, Colo., has occupied for the past 10 years, has been bought by it. The company plans to expand and occupy the entire three stories of the acquired property.

Business is now being conducted at Solomon, Kan., by the Solomon Seed Company which will specialize in Alfalfa, Sudan Grass, cane, kafir and millet seeds. Chas. Henning, Jr. and V. Ralph McCollough are the owners.

A three-story addition is to be built to the warehouse of the Abing Seed Farms, Inc., at Mt. Vernon, Ind., and new cleaning equipment, which will give the plant a cleaning capacity of 20,000 pounds seeds daily, will be installed.

The Des Moines Seed Company of Des Moines, Iowa, which was organized by the Iowa Seed Company five years ago, has bought the merchandise of the parent company. The incorporators of the Des Moines company in the reorganization are: W. J. Newby, president; Mrs. Katherine Brennan, secretary; R. R. Benn, treasurer, and E. T. Peirce, manager.

FINDING USES FOR THE CORN COB

The question of what use can be made of 15 to 20 million tons of corn cobs wasted annually in the corn belt was the topic of an item published recently in the *Research Narratives* issued by the Engineering Foundation of New York. This article says, among other things:

Chemists of the Department of Agriculture, working on the subject since 1918, have discovered new values in cobs and processes for making them commercially available. Iowa State College is investigating production from cobs of furfural, oxalic and acetic acids, wood alcohol, charcoal, activated char, pitch, tar, oils, cob flour, incense, punk, a plastic material, and fermentation products.

The pithy, woody shell, and scaly exterior, or chaff, of the cob, physically so different, chemically are alike. Cobs season in 11 days; wood requires one to two years. Great saving results in interest on raw material carried in stock for cob products.

When cobs are cooked for a few minutes under pressure in superheated water, adhesive materials are extracted. These compounds belong to the same group of chemicals as starch, dextrine and sugars. Pentosanadhesives can be used for pasting fiber boxes and cheap paper bags, and for other purposes not demanding high-grade, strong adhesives. A special use proposed is in manufacture of briquettes from fine sizes of anthracite, of which a superabundance results in preparing that coal for market. Thus utilization of waste cobs could enhance materially the value of near-waste coal; much experimental work has been done.

When cobs are digested for about two hours with steam under 135 pounds pressure per square inch, with very little sulfuric acid, a different product results—furfural. Furfural is an aromatic liquid about one-sixth heavier than water, boiling at 161 degrees C., soluble in 11 parts of water, nearly colorless when first prepared, but darkening on exposure to air and light. It can be obtained also from oat hulls, bran and other vegetable substances. Its use had been limited because of the high cost by methods heretofore employed. In 1920, possibly 50 pounds were used in the United States, only as a laboratory reagent; the price was about \$30. In France and Germany furfural has been made as a by-product in the manufacture of alcohol from wood waste. Annual production is now thousands of pounds, and since 1922 the price has been reduced to 25 cents.

Attention has turned to discovery of additional uses

The Mangelsdorf Seed Co.

Sweet Clover, Alfalfa,
Soudan Grass, Millet, Rape.

ATCHISON

KANSAS

SHAFTING, PULLEYS and BELTING

By Hubert E. Collins

An invaluable work for grain elevators, flour mills, or any other place where machinery is installed. Cloth bound.

Well illustrated. Price \$1.50

Mitchell Bros. Pub. Co. 431 S. Dearborn St., Chicago

North American Seed Co.

Wholesale Grass and Field Seeds

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"THE HOUSE OF QUALITY"

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Wholesale Seed Merchants

Buyers and Sellers

Timothy, Red, White, Alsike and Alfalfa,
Clovers, Redtop and Millet Seeds

SEEDS

BETTER SEEDS; BETTER CROPS

CHAS. E. PRUNTY

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BUYERS—SELLERS, FIELD SEEDS

ED. F. MANGELSDORF & BRO.

Wholesale Field Seeds

First and Victor Sts., St. Louis, Mo.

for furfural and enlargement of its market. More than 60 patents on its production and utilization have been issued, mostly within the past five years, in the United States and other countries.

During the war, a shortage of acetone could easily have been met by distilling cobs.

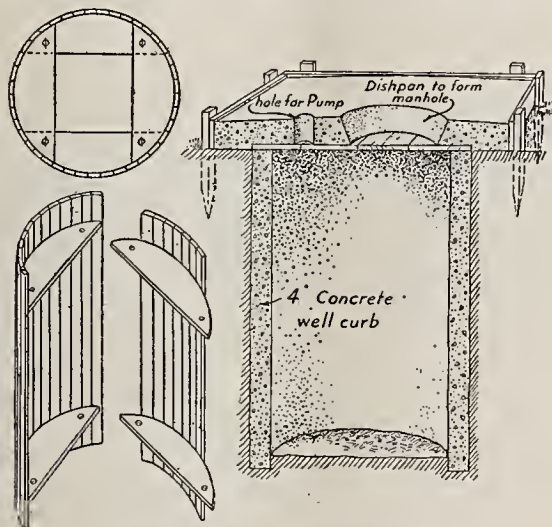
If cobs be treated with phenol or cresol in presence of an acid, a sticky mass results on heating, which ages to a hard, black substance which can be pressed into shape.

There is a promising field in the manufacture of resins similar to Bakelite, suitable for parts of electrical instruments, for printing plates, and various other molded articles. These phenol furfural resins are infusible and insoluble; they have high insulating qualities, great strength and great resistance to water and chemicals. They have a large field in radio equipment. Phonograph records may be made from them. There are also innumerable uses for fiber impregnated with these resins where great toughness and resistance are of value.

CONCRETE WELL CURBS AND PLATFORMS

At times those who handle cement are called upon for advice on methods of handling concrete, and one feature often called for is a well curb and platform. That part of the description which relates to the platform can also be applied when constructing platforms around elevators.

In shallow wells the concrete curb is often extended from top to bottom. In deeper wells and in repairing old wells, a curb extended down seven or eight feet will ordinarily give the required protection against surface pollution. An easily constructed form for making a circular well curb is shown in the accompanying sketch. No outer form is needed if the earthen sides of the well are firm enough to stand without caving. Forms should be made of such size that when assembled and set in the well there will remain a clear space of four inches all around for filling with 1-2-3 mixture of concrete; i. e., one part cement, two parts sand, and three parts gravel or broken stone. The forms shown are designed to make their removal easy and so that they can be raised and reset to build as many sections as required.



CROSS SECTION OF CONCRETE CURB

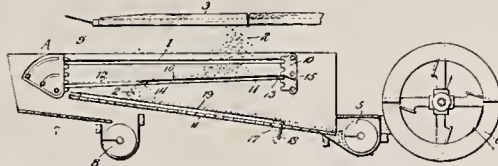
The usual forms for making well platforms are also shown. A manhole is provided by setting an ordinary dishpan, 18 or 20 inches across, on the form at the proper place. A cover to fit this opening is made by casting it in the dishpan. A hole for the pump is made by placing concrete around a strip of tin bent in the form of a cylinder which can be collapsed and removed after the concrete has hardened. For the well platform a 1-2-3 concrete mixture will be satisfactory. Some reinforcement, either 1/4 inch rods or wire mesh, is desirable, the reinforcing materials being located about one inch from the underside of the slab in both directions, continuing them around the manhole by bending. Space the rods about six inches apart in both directions.

Grain door.—Edward Posson, Chicago, Ill., assignor of one-half to Frederick C. Maegly, Chicago, Ill. Filed May 16, 1919. No. 1,511,839.

Means for separating weed seed from grain.—Hans Larsen, Saskatoon, Sask., Canada. Filed August 6, 1921. No. 1,511,34. See cut.

Claim: In a grain separator, the combination with a shoe, spaced racks supported therein, a screen supported by said racks, a frame formed of side bars and cross bars engaging at its ends said racks, an imperforate plate extending from that end of the frame nearest to the winnowing fan of the separator partway along the side bars and spaced vertically from said screen, said plate being disposed below that portion of

said screen from the end of the screen nearest to the winnowing fan and extending back over half the length thereof, whereby all the weed seed and grain falling

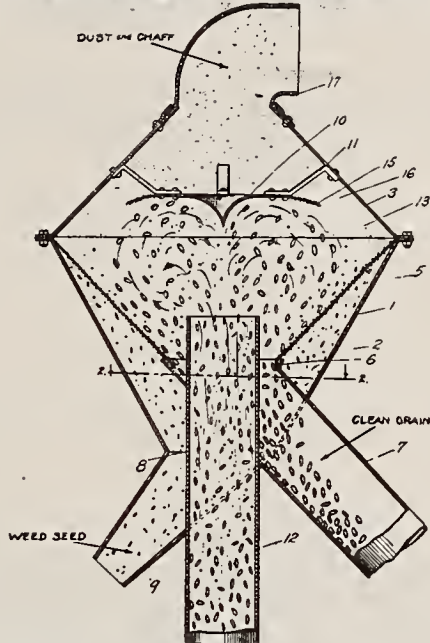


from said screen is caught by said imperforate plate, and an inclined deflecting plate extending from said frame beyond its connection with one of the racks toward the fan.

Bearing Date of October 21, 1924

Grain Cleaner.—Halbert C. Wallace, Kansas City, Mo. Filed October 8, 1923. No. 1,512,323. See cut.

Claim: A grain cleaner comprising a casing consisting of two cone members connected at their base ends, a pipe projecting through the vertex of the lower



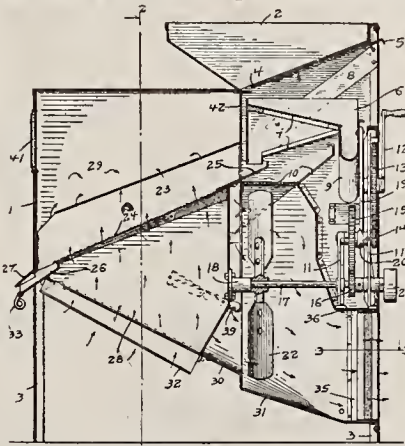
cone member, a conical screen carried by the lower cone member and discharging into a spout having an inlet surrounding the pipe, an outlet for the bottom of the lower cone member, and a baffle in the casing above the pipe, the upper end of the casing being provided with an opening.

Bearing Date of October 28, 1924

Pneumatic cleaner for beans and the like.—Frank D. Brown, Batavia, N. Y. Filed March 20, 1924. No. 1,513,482.

Grain cleaning device.—William T. Merzenich, Minneapolis, Minn., assignor to Arthur Stremel, Wayzata, Minn. Filed November 9, 1922. No. 1,513,623. See cut.

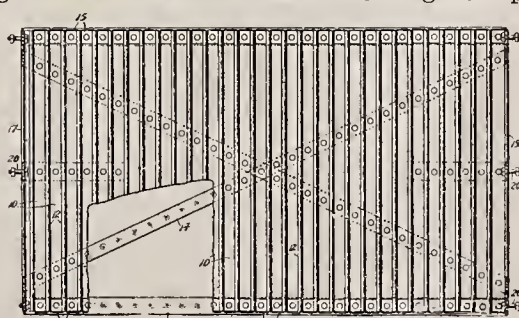
Claim: A grain cleaning device having in combination, a casing, a trough having a perforated bottom extending therethrough, air chambers at the sides of said trough having imperforate walls, the perforate bottom of said trough being in communication with the atmosphere, means for drawing a blast of air upwardly



through the bottom of said trough and through said chambers and forcing the same out at one end of the casing below said trough, and means below said trough for regulating the blast of air passing therethrough.

Bearing Date of November 4, 1924

Grain carrier.—Ernest Coburn, Spokane, Wash., assignor to The Holt Manufacturing Company,



Stockton, Calif., a corporation of California. Filed June 23, 1920. No. 1,514,131. See cut.

Claim: An endless flexible carrier for grain, comprising a series of transversely extending cells, each

formed of a channel-shaped member having a bottom web, a single flange, and a double flange, the single flange being interlocked with the double flange of the adjacent cell and movable to permit the interlocked members to flex, separate metallic end-walls for the cells, and endless flexible straps to which said cell members are connected.

HOW TO MAKE CONCRETE FLOORS

The ease with which concrete floors can be cleaned and kept clean makes it the preferred material for floors in many instances—among them the elevator and other buildings. Many farmers might also use concrete for their poultry houses, hog houses and other buildings where livestock is housed if they knew how easy it is to make such an improvement.

First remove all boards, sticks, rubbish and other material from the area to be paved, then fill in any soft or low spots and tamp them till firm. The concrete may be placed directly on the earth if the building is located on high ground or where drainage from beneath the floor is good. Otherwise, a six or eight-inch fill of cinders or gravel is advisable. Floors of concrete are generally built in sections or in strips for convenience in placing concrete and finishing the surface. In dairy and horse barns, floors should be made from five to six inches thick, while in hog houses a thickness of four or five inches will suffice, and in poultry houses three inches is often sufficient.

One course work is recommended for all types of floors, which means that the full thickness of the floor is placed in one operation, using the same mixture of concrete throughout. A small amount

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For Elevators and Flour Mills

All Sizes

ST. MARY'S OIL ENGINE COMPANY

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Hunt Coupling for Controlling the Stretch of Manila Transmission Ropes



Ask for Descriptive Catalog M-17-1

C. W. Hunt Co., Inc., West New Brighton, N. Y.

GRAIN TRADE PATENTS

Bearing Date of October 14, 1924

Grain door.—Edward Posson, Chicago, Ill., assignor of one-half to Frederick C. Maegly, Chicago, Ill. Filed May 16, 1919. No. 1,511,839.

Means for separating weed seed from grain.—Hans Larsen, Saskatoon, Sask., Canada. Filed August 6, 1921. No. 1,511,34. See cut.

Claim: In a grain separator, the combination with a shoe, spaced racks supported therein, a screen supported by said racks, a frame formed of side bars and cross bars engaging at its ends said racks, an imperforate plate extending from that end of the frame nearest to the winnowing fan of the separator partway along the side bars and spaced vertically from said screen, said plate being disposed below that portion of

of cement mortar (one part cement and three parts sand) may be used in finishing if necessary. Usually no trouble will be experienced in obtaining a satisfactory surface with the standard floor mixture of one part cement, two parts sand, and three parts pebbles or crushed stone if it be tamped well to force the larger particles away from the surface. Concrete should be kept moist until the surface is sufficiently hard to carry traffic.

The Western Grain Company, grain, flour and feed dealers at Ft. Smith, Ark., has been adjudged bankrupt.

An involuntary petition in bankruptcy has been filed against the Blake-Dobbs Company, Inc., grain dealers on the New York Produce Exchange. The firm's liabilities are \$1,500,000 and assets, \$25,000.

TRANSPORTATION

PETITION FOR LOWER GRAIN RATES

The Atchison, Topeka and Santa Fe Railway Company petitioned the Interstate Commerce Commission to reopen the hearing in which the commission denied it authority to disregard the long and short haul provisions of the Interstate Commerce Act in respect to certain grain commodities moving in Kansas, Missouri and Texas.

Specifically the road desired to charge lower rates on wheat, corn and hay and articles taking the same rates from Kansas City to St. Joseph, Mo., Argentine, Atchison, Leavenworth and other points in Kansas to Galveston, Port Bolivar and Texas City, Texas, than are charged from intermediate points on its line.

STORAGE FLEET AT BUFFALO

That Buffalo will have an exceptionally large fleet of winter storage grain-laden vessels at the close of the present season of navigation, is the consensus of opinion among the marine men. Some say that other ports will also have quite a number of big freighters holding grain at the close of the season.

One veteran shipmaster said: "I was in the midst of a group of men interested in the grain trade at Duluth a few days ago and one of the most prominent and most conservative of the party said that boats would be breaking ice to get grain out of Duluth at the very latest part of the season."

One day early this month there were 15 freighters under the Buffalo breakwall with a total of 5,803,000 bushels aboard. The same date vessels at Buffalo elevators had on 2,904,000 bushels and on the preceding day the elevators unloaded 1,745,000 bushels.

GRAIN CASES IN THE SOUTHWEST

Several cases involving grain in the Southwest have recently occupied the attention of the Commission. Up to the time of going to press the cases were still under consideration.

The leading complaint alleged unreasonable rates on grain and grain products, hay, straw and articles taking the same rates or rates basing thereon, from all points in Oklahoma to all points in Texas, and illegal discrimination against Oklahoma farmers, producers, dealers and manufacturers in favor of Texans. In a broad way of speaking it was a complaint by the Oklahoma commission against an adjustment alleged to have resulted from the rates prescribed by Texas. Commissioner Golmore of the Texas commission sat on the bench with the federal commissioners.

Time for arguments was assigned to Paul A. Walker for a discussion of the cases joined together for hearing and argument; H. D. Driscoll for the Oklahoma millers who objected to, among other things, higher rates on flour than on wheat; W. R. Scott, for the complainants in No. 13,518, Kansas City interests; V. L. Lockwood, for Texas wheat growers; F. A. Leffingwell, for the Texas Industrial Traffic League; H. E. Ketner, for Fort Worth interests; S. J. Cole, J. N. Beasley and W. F. Craddock, for Amarillo interests; H. B. Dorsey, for grain dealers; E. H. Thornton, for Galveston interests, and A. B. Enoch, for the carriers.

BIG FREIGHT TRAFFIC HANDLED

With another record for all time established by the railroads in the handling of freight, indications still point to a continuance of heavy shipments for a few weeks to come. Practically no car shortage is being reported, yet during the week ended October 25 the railroads loaded 1,112,345 cars of revenue freight.

There are still nearly 95,000 surplus freight cars in good repair and about 5,000 locomotives in storage ready for immediate service. There is a surplus of 46,476 coal cars in good repair ready for the heavier movement of coal which is getting under way.

The movement of grain and grain products continues at a high level, and miscellaneous freight

loadings, which give some indication of the general business conditions throughout the country, are greater than ever before. Merchandise and less than carload lot freight is also considered a barometer and is at present running far ahead of the last two years.

FAVORABLE REPORT BY BOARD IN MIDWEST

That transportation and business conditions are improved in the Middle West was clearly shown by the favorable tenor of the commodity committee reports, by reports from the railroads and by talks heard at the meeting of the Midwest Regional

For Sale

MACHINERY

OIL ENGINES FOR SALE

Twenty-five horse Y; 35-horse Primm. A. H. McDONALD, 547 W. Monroe St., Chicago, Ill.

FOR SALE

Eighty-horsepower Ames Steam Engine with direct connected 50 K. W., D. C. current, 240 volt Generator. A-1 condition. FARMERS' CO-OPERATIVE ELEVATOR, Fowler, Mich.

WANTED TO BUY FOR SALE

Pulleys, 1,000; all sizes, solid cast iron, wood and steel split. Elevator belts and buckets and supplies. STANDARD MILL SUPPLY COMPANY, 501 Waldheim Building, Kansas City, Mo.

OIL ENGINES FOR SALE

60-horsepower Fairbanks-Morse.
50-horsepower Otto.
25-horsepower Fairbanks-Morse.
50 other sizes.

A. H. McDONALD, 547 W. Monroe St., Chicago, Ill.

FOR SALE

Two 30 h.p., 220 volt, direct current, interpole, two speed elevator motors with control boards. The boards are equipped with three step dynamic breaking. This equipment has been in service one year and is in first-class shape. Price is \$400 each f.o.b. Cleveland. THE MOTOR REPAIR & MFG. CO., 1549-1551 Hamilton Ave., Cleveland, Ohio.

FOR SALE

Attrition mills: 22-inch ball bearing Bauer; 18, 20 and 24-inch Dreadnaught; 16 to 24-inch motor and belted Sprout-Waldron; 12 to 26-inch ball bearing Diamond Single Runner, motor and belt driven; factory rebuilt and guaranteed like new. Ten-inch Letz, 18-inch American Grinder Dreadnaught Crusher. Feed screen, elevators. L. F. PERRIN, Box 375, Port Huron, Mich.

D. C. GENERATOR SETS

1 Western Electric 250 Amp. to 14-in. x 14-in. Buckeye.

1 Western Electric 420 Amp. to 14-in. x 24-in. Buckeye.

1 Western Electric 1000 Amp. belted to 14-in. x 24-in. x 42-in. Cross Compound Corliss.

R. R. DONNELLY & SONS COMPANY
731 Plymouth Court, Chicago, Ill.

MACHINERY MUST BE SOLD

Complete outfit of machinery for shelling, drying, cleaning and grinding seed corn, capacity 60 to 100 bushels an hour. Two-hole Eureka Corn Sheller, manufactured by the Joliet Mfg. Co. Hess Ideal Dryer No. 3. Cracked corn cleaner and grader, manufactured by the Huntley Mfg. Co. Fifteen-horse steam engine and boiler, together with an elevating and conveying apparatus to make plant work automatically. Business discontinued. SUFFOLK CO-OPERATIVE ASSOCIATION, Mattituck, N. Y.

REAL BARGAINS IN ELEVATOR EQUIPMENT

Now dismantling Indianapolis Elevator Co.'s Elevator "A," Washington and Harding Sts.

Eight motors, Westinghouse and Allis-Chalmers, 30-75 h.p., 1150-1170 r.p.m.

Two steel grain storage tanks.

Four copper scales, capacity ½ to 1 car.

One Invincible Oats Clipper, 1,500 bushels per hour.

Two Invincible Grain Cleaners, 300 bushels per hour.

One car puller.

Four double power shovels.

Two Invincible Grain Cleaners, 300 bushels per hour.

Boilers, pumps, fittings, etc.

Belting, buckets and pulleys.

Gears, shafting, etc., etc.

Send us your requirements for estimate.

NEW WRECKING COMPANY, 221 S. New Jersey St., Indianapolis, Ind.

ELEVATORS AND MILLS

FOR SALE

Elevator at Tuttle, Oklahoma. Inquire BARTELDES SEED COMPANY, Lawrence, Kan.

FOR SALE

Kansas elevator, 7,000-bushel, on Santa Fe. Owner selling on account of health. Doing good business; excellent corn crop. Price \$5,000. O. D. AMEND, Cummings, Kan.

BEST FLOUR MILL OPPORTUNITY AVAILABLE

For sale or exchange at a genuine bargain.

Located in Temple, central Texas, city of 15,000 people, on main lines of M. K. & T. and G. C. & S. F. Railroads, with branch line of Katy to Belton, and branch line on Santa Fe to west Texas and California. Transit privileges on both roads.

Brick mill building, three-stories, on stone basement, with brick warehouse adjoining. Frame warehouse; thoroughly equipped elevator; two steel tanks, each with approximate capacity 55,000 bushels; daily mill capacity 300 barrels flour, and 168,000 lbs. of meal. Plant properly managed and operated will produce one-half to one million dollar business annually.

Wonderful opportunity for party who understands the milling business and has the money and ability to operate it, not only as a milling industry, but as a profitable, wholesale and retail grain business.

Can be bought at a figure far less than its actual value.

Best possible reasons for selling.

P. L. DOWNS, Temple, Texas.

Miscellaneous Notices

FOR SALE

Dark red kidney beans. C. W. BIGLER, Wayne, Mich.

WANTED

Bean and pea pickings and millings, also low germination stock. GEORGE W. YOUNG CO., Owosso, Mich.

PEONIES

Thirty acres devoted to Peonies, best commercial varieties. Write for wholesale list. GILBER H. WILD & SON, Sarcoxie, Mo.

FLOUR AND MILL FEEDS

Mixed cars of flour and mill feeds in 100-pound sacks are our specialties. Would like to send you a trial order to convince you of the superiority of our products. ANSTED & BURK CO., Springfield, Ohio.

COAL

SOUTHERN ILLINOIS RATES TO NEBRASKA AND IOWA REDUCED

Through a recent order of the Interstate Commerce Commission rates on steam coals from southern Illinois to Omaha, South Omaha and Council Bluffs, Iowa, have been reduced. Reductions amount to from 17½ to 32½ cents a ton. The old rates were attacked by the Illinois Coal Traffic Bureau as discriminatory as compared to rates from Belleville, Ill., to the same points.

ASSIGNED COAL CAR DATE CHANGED

A change has been made in the effective date of the assigned car order of the Interstate Commerce Commission, restricting and regulating the distribution of railroad cars to coal mines of privately owned cars and cars for railroad fuel, from November 1 to December 15. The Commission's decision made on June 30, 1923, held unjust the practice of railroads assigning the private and system cars for railway fuel to bituminous coal mines in excess of the ratable share at mines upon their lines.

COAL PRODUCTION IN ILLINOIS

During the year ending June 30, 1924, the coal mines of Illinois produced 73,308,655 tons of coal. The figures show that the shipping mines produced approximately 70,000,000 tons and the balance was from the local mines of the state. About 21,918,000

tons were bought by railroad companies and 463,723 tons were supplied directly to locomotives.

M. M. Leighton of Urbana, chief of the State Geological Survey in commenting on the coal situation in Illinois, said that at present the mining of coal on a commercial scale is limited to five beds, known in geological and mining circles as Nos. 1, 2, 5, 6 and 7.

The Iowa Falls Co-operative Elevator Company of Bradford, Iowa, has installed new dumps and engine house and coal buildings.

To deal in coal, hay, lumber, etc., the Westbury Lumber Company has been incorporated at Hempstead, N. Y., capitalized at \$50,000.

The business of the Florence Seed & Grain Company at Florence, Ariz., operated by the Mesa Milling Company has been bought by the Pinal Fuel & Grain Company.

A shed for handling coal is being built by the J. M. Bergeson Grain Company of Earlville, Ill. The new coal shed will have four bins with a capacity of 200 tons.

The name of the Truby Company of Joliet, Ill., has been changed to the Truby Grain, Feed & Coal Company and the capital stock increased from \$10,000 to 1,000 shares no par value. James R. Bentley is president.

The elevator and coal sheds of the Zumbrota Farmers Mercantile & Elevator Company at Zumbrota, Minn., have been taken over by a new firm which is to operate as the Farmers Coal & Grain Company. N. P. Nesseth is manager.

The elevator at Hanford (Mason City p. o.), Iowa, owned by the Independent Grain & Lumber Company has been leased by Rankin & Clarke of Rockwell. They will continue to handle grain, coal, flour, feed and to operate the house at Rockwell.

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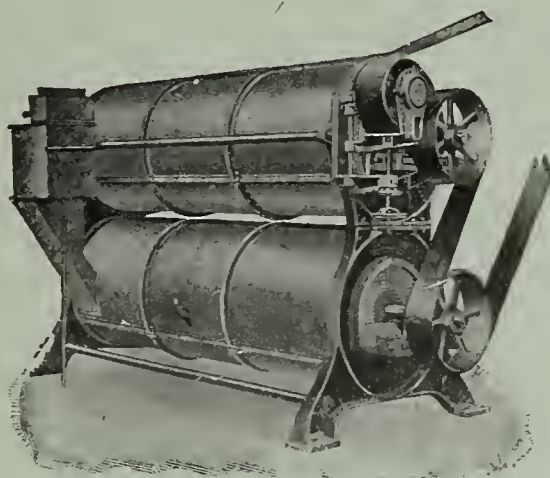
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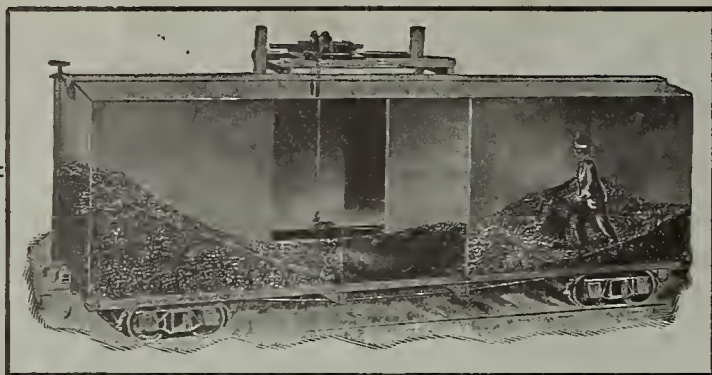
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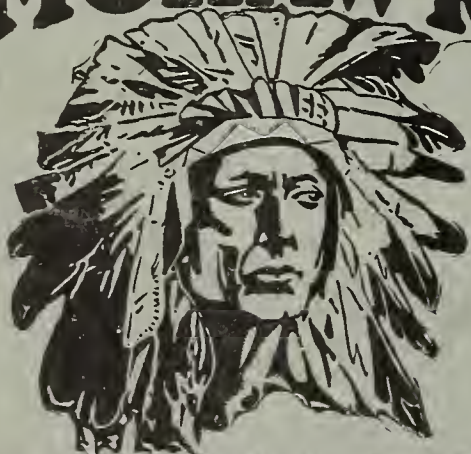
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